

APPENDIX B

Groundwater Analytical Data

ANALYTICAL REPORT

Job Number: 200-22132-1

SDG Number: 200-22132

Job Description: AMETEK - Sellersville

For:

Langan Engineering & Environmental Svcs
2700 Kelly Road
Suite 200
Warrington, PA 18976

Attention: Valentina Beneski



Approved for release.
Kathryn A Kelly
Project Manager I
5/16/2014 5:00 PM

Kathryn A Kelly, Project Manager I
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05/16/2014

The test results in this report relate only to sample(s) as received by the laboratory. These test results were derived under a quality system that adheres to the requirements of NELAC. Pursuant to NELAC, this report may not be produced in full without written approval from the laboratory

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CASE NARRATIVE

Client: Langan Engineering & Environmental Svcs

Project: AMETEK - Sellersville

Report Number: 200-22132-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 05/01/2014, 05/02/2014 and 05/03/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.2, 1.6 and 2.6 C.

The container label for the following sample(s) did not match the information listed on the Chain-of-Custody (COC): MW-15D_050114. The container labels list a sample ID of MW-15D_050114. The COC lists a sample ID of 15D_050114. The sample was logged in per the sample ID from the container.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): MW-20D_050214. The container labels list the sample ID as MW-20D_050214, while the COC lists the sample ID as MW-20_050214.

One of three mL HCL preserved vials for MW-12S_050114, and MW-15S_050214 were received frozen and broken.

Samples EB-4_050114, MW-11S_050214, MW-15S_050214, and MW-7S_050214 were received frozen with head space in one of the three 40 mL sample vials.

Samples MW-12D_050214, and MW-24S_050114 were received frozen with head space in two of the three 40 mL sample vials.

VOLATILE ORGANIC COMPOUNDS - TRACE

Samples MW-12S_050114, MW-18S_042914, MW-19D_050114, EB-4_050114, FB-1_042914, MW-16S_050114, MW-24S_050114, EB-2_042914, MW-17S_050114, TRIP BLANK, MW-17D_050114, MW-11S_050214, VHBLK01, MW-21D_050114, MW-12D_050214, MW-21S_050114, MW-20D_050214, MW-15S_050214, MW-20S_050114, MW-7S_050214, MW-11D_050114, MW-5S_050214, MW-5D_050114, EB-6_050214, DUP_050114, FB-3_050214, MW-15D_050114, TB_050214, FB-2_050114 and TRIP BLANK were analyzed for Volatile Organic Compounds - Trace in accordance with EPA SOW SOM01.2. The samples were analyzed on 05/08/2014, 05/12/2014, 05/13/2014 and 05/14/2014.

Bromomethane was detected in method blank MB 200-71915/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, Bromomethane and Chloromethane were detected in method blank MB 200-72030/9 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Bromomethane was detected in method blank MB 200-72092/4 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Several samples in this sample set had surrogate outages, please refer to the QC report for details.

Samples MW-12S_050114[1.7X], MW-24S_050114[2.8X], MW-11S_050214[42X], MW-11S_050214[8.4X], MW-12D_050214[3.2X], MW-20D_050214[26X], MW-20D_050214[5.3X], MW-15S_050214[26X], MW-15S_050214[7.6X], MW-7S_050214[14X], MW-7S_050214[70X], MW-5S_050214[131X] and MW-5S_050214[656X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the VOC analysis.

All other quality control parameters were within the acceptance limits.

✓ **1,4-DIOXANE**

Samples EB-1_042914, EB-3_050114, MW-12S_050114, MW-19D_050114, EB-4_050114, FB-1_042914, MW-24S_050114, EB-2_042914, EB-5_050214, MW-11S_050214, MW-20D_050214, MW-22D_050114, MW-15S_050214, MW-7S_050214, MW-5S_050214, MW-5D_050114, EB-6_050214, DUP_050114, FB-3_050214, MW-15D_050114 and FB-2_050114 were analyzed for 1,4-Dioxane in accordance with EPA Method 522.1. The samples were prepared on 05/08/2014 and 05/13/2014 and analyzed on 05/09/2014, 05/13/2014, 05/14/2014 and 05/15/2014.

1,4-Dioxane-d8 (Surr) failed the surrogate recovery criteria low for MW-11S_050214, please refer to the QC report for details.

Samples MW-11S_050214[10X], MW-7S_050214[2.5X] and MW-5S_050214[33.33X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the 1,4-Dioxane analysis.

All other quality control parameters were within the acceptance limits.

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica BurlingtonJob No.: 200-22132-1SDG No.: 200-22132Instrument ID: D.iAnalysis Batch Number: 71833Lab Sample ID: IC 200-71833/3

Client Sample ID: _____

Date Analyzed: 05/08/14 08:41Lab File ID: d1103.dGC Column: DB-624ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dibromoethane	8.93	Analyte not identified by the data system	wilburj	05/08/14 09:54
1,1,2,2-Tetrachloroethane	11.08	Analyte not identified by the data system	wilburj	05/08/14 09:55

SOM01.2/VOA_Tr

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-22132-1

SDG No.: 200-22132

Instrument ID: D.i

Analysis Batch Number: 71915

Lab Sample ID: 200-22155-5

Client Sample ID: MW-17D_050114

Date Analyzed: 05/08/14 16:23

Lab File ID: dll1a14.d

GC Column: DB-624

ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
trans-1,2-Dichloroethene	3.61	Analyte not identified by the data system	wilburj	05/09/14 09:49

Lab Sample ID: 200-22155-6

Client Sample ID: MW-21D_050114

Date Analyzed: 05/08/14 16:47

Lab File ID: dll1a15.d

GC Column: DB-624

ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
trans-1,2-Dichloroethene	3.61	Analyte not identified by the data system	wilburj	05/09/14 09:51
Tetrachloroethene	8.50	Analyte not identified by the data system	wilburj	05/09/14 09:52

Lab Sample ID: 200-22155-11

Client Sample ID: MW-5D_050114

Date Analyzed: 05/08/14 18:26

Lab File ID: dll1a19.d

GC Column: DB-624

ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
trans-1,2-Dichloroethene	3.60	Analyte misidentified by the data system	wilburj	05/09/14 10:29

Lab Sample ID: 200-22155-11 MS

Client Sample ID: MW-5D_050114 MS

Date Analyzed: 05/08/14 18:50

Lab File ID: dll1a20.d

GC Column: DB-624

ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.07	Analyte misidentified by the data system	wilburj	05/09/14 10:31

SOM01.2/VOA_Tr

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica BurlingtonJob No.: 200-22132-1SDG No.: 200-22132Instrument ID: D.iAnalysis Batch Number: 71915Lab Sample ID: 200-22155-11 MSDClient Sample ID: MW-5D_050114 MSDDate Analyzed: 05/08/14 19:15Lab File ID: dll1a21.dGC Column: DB-624 ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.08	Analyte not identified by the data system	wilburj	05/09/14 10:37

Lab Sample ID: 200-22155-12Client Sample ID: DUP_050114Date Analyzed: 05/08/14 19:40Lab File ID: dll1a22.dGC Column: DB-624 ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
trans-1,2-Dichloroethene	3.61	Analyte not identified by the data system	wilburj	05/09/14 10:39

Lab Sample ID: 200-22155-14Client Sample ID: FB-2_050114Date Analyzed: 05/08/14 20:29Lab File ID: dll1a24.dGC Column: DB-624 ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Isopropylbenzene	10.71	Analyte not identified by the data system	wilburj	05/09/14 10:44

Lab Sample ID: 200-22183-1Client Sample ID: MW-12S_050114Date Analyzed: 05/08/14 21:18Lab File ID: dll1a26.dGC Column: DB-624 ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.08	Analyte not identified by the data system	wilburj	05/09/14 10:47

SOM01.2/VOA_Tr

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica BurlingtonJob No.: 200-22132-1SDG No.: 200-22132Instrument ID: D.iAnalysis Batch Number: 72030Lab Sample ID: 200-22183-10 DLClient Sample ID: MW-5S_050214 DLDate Analyzed: 05/12/14 16:55Lab File ID: d11d10.dGC Column: DB-624ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
trans-1,2-Dichloroethene	3.61	Baseline event	wilburj	05/13/14 09:58

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-22132-1

SDG No.: 200-22132

Instrument ID: D.i

Analysis Batch Number: 72110

Lab Sample ID: IC 200-72110/4

Client Sample ID:

Date Analyzed: 05/14/14 08:36

Lab File ID: dlm04.d

GC Column: DB-624

ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.24	Analyte not identified by the data system	mtp	05/14/14 09:54
Bromodichloromethane	6.96	Analyte not identified by the data system	mtp	05/14/14 09:54
1,2-Dibromoethane	8.93	Analyte not identified by the data system	mtp	05/14/14 09:54
Bromoform	10.50	Analyte not identified by the data system	mtp	05/14/14 09:54
1,1,2,2-Tetrachloroethane	11.09	Analyte not identified by the data system	mtp	05/14/14 09:55
1,2-Dibromo-3-chloropropane	13.56	Analyte not identified by the data system	mtp	05/14/14 09:55

Lab Sample ID: IC 200-72110/5

Client Sample ID:

Date Analyzed: 05/14/14 09:01

Lab File ID: dlm05.d

GC Column: DB-624

ID: 0.2 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromodichloromethane	6.96	Analyte not identified by the data system	mtp	05/14/14 09:55
1,2-Dibromoethane	8.93	Analyte not identified by the data system	mtp	05/14/14 09:55
Bromoform	10.50	Analyte not identified by the data system	mtp	05/14/14 09:55
1,1,2,2-Tetrachloroethane	11.09	Analyte not identified by the data system	mtp	05/14/14 09:55

SOM01.2/VOA_Tr

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington Job No.: 200-22132-1
SDG No.: 200-22132
Instrument ID: CHZ.i Analysis Batch Number: 70435
Lab Sample ID: IC 200-70435/2 Client Sample ID:
Date Analyzed: 04/07/14 12:03 Lab File ID: Z6913_002.D GC Column: ZB-SVOA ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.59	Baseline Event	weigelk	04/07/14 12:17
1,4-Dioxane-d8 (Surr)	3.52	Baseline Event	weigelk	04/07/14 12:17
1,4-Dioxane	3.56	Baseline Event	weigelk	04/07/14 12:17

Lab Sample ID: IC 200-70435/3 Client Sample ID:
Date Analyzed: 04/07/14 12:32 Lab File ID: Z6913_003.D GC Column: ZB-SVOA ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.57	Baseline Event	jensend	04/07/14 13:23

Lab Sample ID: IC 200-70435/4 Client Sample ID:
Date Analyzed: 04/07/14 12:51 Lab File ID: Z6913_004.D GC Column: ZB-SVOA ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.58	Baseline Event	jensend	04/07/14 13:23

Lab Sample ID: ICISAV 200-70435/5 Client Sample ID:
Date Analyzed: 04/07/14 13:12 Lab File ID: Z6913_005.D GC Column: ZB-SVOA ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.57	Baseline Event	jensend	04/07/14 13:45

Lab Sample ID: IC 200-70435/6 Client Sample ID:
Date Analyzed: 04/07/14 13:32 Lab File ID: Z6913_006.D GC Column: ZB-SVOA ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.57	Baseline Event	jensend	04/07/14 13:47

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica BurlingtonJob No.: 200-22132-1SDG No.: 200-22132Instrument ID: CHZ.iAnalysis Batch Number: 70435Lab Sample ID: IC 200-70435/8

Client Sample ID: _____

Date Analyzed: 04/07/14 14:15Lab File ID: Z6913_008.DGC Column: ZB-SVOAID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.59	Baseline Event	jensend	04/07/14 14:46

Lab Sample ID: ICV 200-70435/9

Client Sample ID: _____

Date Analyzed: 04/07/14 14:35Lab File ID: Z6913_009.DGC Column: ZB-SVOAID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.58	Baseline Event	jensend	04/07/14 14:46

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-22132-1

SDG No.: 200-22132

Instrument ID: CHZ.i

Analysis Batch Number: 71845

Lab Sample ID: CCVIS 200-71845/27

Client Sample ID:

Date Analyzed: 05/08/14 21:39

Lab File ID: Z7454_027.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.59	Baseline Event	jensend	05/09/14 08:32
1,4-Dioxane-d8 (Surr)	3.52	Baseline Event	jensend	05/09/14 08:32
1,4-Dioxane	3.56	Baseline Event	jensend	05/09/14 08:32

Lab Sample ID: MB 200-71836/1-A

Client Sample ID:

Date Analyzed: 05/08/14 22:42

Lab File ID: Z7454_030.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane-d8 (Surr)	3.53	Baseline Event	jensend	05/09/14 08:34

Lab Sample ID: 200-22155-1

Client Sample ID:

Date Analyzed: 05/09/14 03:55

Lab File ID: Z7454_043.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.58	Baseline Event	jensend	05/09/14 08:44

Lab Sample ID: 200-22155-2

Client Sample ID:

Date Analyzed: 05/09/14 04:16

Lab File ID: Z7454_044.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.59	Baseline Event	jensend	05/09/14 08:45
1,4-Dioxane	3.56	Baseline Event	jensend	05/09/14 08:45

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-22132-1

SDG No.: 200-22132

Instrument ID: CHZ.i

Analysis Batch Number: 71845

Lab Sample ID: 200-22155-8

Client Sample ID:

Date Analyzed: 05/09/14 04:36

Lab File ID: Z7454_045.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.57	Baseline Event	jensend	05/09/14 08:45

Lab Sample ID: 200-22155-11

Client Sample ID:

Date Analyzed: 05/09/14 04:57

Lab File ID: Z7454_046.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.59	Baseline Event	jensend	05/09/14 08:45

Lab Sample ID: 200-22155-11 MSD

Client Sample ID:

Date Analyzed: 05/09/14 05:18

Lab File ID: Z7454_047.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.59	Baseline Event	jensend	05/09/14 08:46
1,4-Dioxane	3.56	Baseline Event	jensend	05/09/14 08:46

Lab Sample ID: 200-22155-11 MS

Client Sample ID:

Date Analyzed: 05/09/14 05:39

Lab File ID: Z7454_048.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.60	Baseline Event	jensend	05/09/14 08:47
1,4-Dioxane-d8 (Surr)	3.52	Baseline Event	jensend	05/09/14 08:47

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-22132-1

SDG No.: 200-22132

Instrument ID: CHZ.i

Analysis Batch Number: 71845

Lab Sample ID: CCVIS 200-71845/54

Client Sample ID:

Date Analyzed: 05/09/14 06:42

Lab File ID: Z7454_054.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.61	Baseline Event	jensend	05/09/14 08:48
1,4-Dioxane	3.56	Baseline Event	jensend	05/09/14 08:48

Lab Sample ID: 200-22155-14

Client Sample ID:

Date Analyzed: 05/09/14 07:23

Lab File ID: Z7454_051.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.60	Baseline Event	jensend	05/09/14 08:49
1,4-Dioxane	3.56	Baseline Event	jensend	05/09/14 08:49

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-22132-1

SDG No.: 200-22132

Instrument ID: CHZ.i

Analysis Batch Number: 72050

Lab Sample ID: CCVIS 200-72050/1

Client Sample ID:

Date Analyzed: 05/13/14 17:02

Lab File ID: Z7522_001.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.61	Baseline Event	jensend	05/13/14 17:54

Lab Sample ID: LCS 200-72018/2-A

Client Sample ID:

Date Analyzed: 05/13/14 17:18

Lab File ID: Z7522_003.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.62	Baseline Event	jensend	05/14/14 11:00
1,4-Dioxane-d8 (Surr)	3.53	Baseline Event	jensend	05/14/14 11:00
1,4-Dioxane	3.58	Baseline Event	jensend	05/14/14 11:00

Lab Sample ID: MB 200-72018/1-A

Client Sample ID:

Date Analyzed: 05/13/14 17:34

Lab File ID: Z7522_004.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.62	Baseline Event	jensend	05/14/14 10:59

Lab Sample ID: 200-22132-1

Client Sample ID:

Date Analyzed: 05/13/14 17:50

Lab File ID: Z7522_005.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.61	Baseline Event	jensend	05/14/14 10:59
1,4-Dioxane-d8 (Surr)	3.53	Baseline Event	jensend	05/14/14 10:59

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-22132-1

SDG No.: 200-22132

Instrument ID: CHZ.i

Analysis Batch Number: 72050

Lab Sample ID: 200-22132-3

Client Sample ID:

Date Analyzed: 05/13/14 18:05

Lab File ID: Z7522_006.D

GC Column: ZB-SVOA ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.62	Baseline Event	jensend	05/14/14 11:01
1,4-Dioxane-d8 (Surr)	3.53	Baseline Event	jensend	05/14/14 11:01

Lab Sample ID: 200-22132-4

Client Sample ID:

Date Analyzed: 05/13/14 18:21

Lab File ID: Z7522_007.D

GC Column: ZB-SVOA ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.62	Baseline Event	jensend	05/14/14 11:01

Lab Sample ID: 200-22183-1

Client Sample ID:

Date Analyzed: 05/13/14 18:37

Lab File ID: Z7522_008.D

GC Column: ZB-SVOA ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.63	Baseline Event	jensend	05/14/14 11:01
1,4-Dioxane	3.58	Baseline Event	jensend	05/14/14 11:01

Lab Sample ID: 200-22183-2

Client Sample ID:

Date Analyzed: 05/13/14 18:52

Lab File ID: Z7522_009.D

GC Column: ZB-SVOA ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.62	Baseline Event	jensend	05/14/14 11:02
1,4-Dioxane	3.58	Baseline Event	jensend	05/14/14 11:02

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-22132-1

SDG No.: 200-22132

Instrument ID: CHZ.i

Analysis Batch Number: 72050

Lab Sample ID: 200-22183-3

Client Sample ID:

Date Analyzed: 05/13/14 19:08

Lab File ID: Z7522_010.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.62	Baseline Event	jensend	05/14/14 11:02
1,4-Dioxane	3.58	Baseline Event	jensend	05/14/14 11:02

Lab Sample ID: 200-22183-4

Client Sample ID:

Date Analyzed: 05/13/14 19:24

Lab File ID: Z7522_011.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.65	Baseline Event	jensend	05/14/14 11:03
1,4-Dioxane-d8 (Surr)	3.55	Baseline Event	jensend	05/14/14 11:03

Lab Sample ID: 200-22183-7

Client Sample ID:

Date Analyzed: 05/13/14 19:55

Lab File ID: Z7522_013.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.64	Baseline Event	jensend	05/14/14 11:04
1,4-Dioxane-d8 (Surr)	3.55	Peak not found by the data system	jensend	05/14/14 11:04

Lab Sample ID: 200-22183-8

Client Sample ID:

Date Analyzed: 05/13/14 20:11

Lab File ID: Z7522_014.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.62	Baseline Event	jensend	05/14/14 11:05
1,4-Dioxane-d8 (Surr)	3.53	Peak not found by the data system	jensend	05/14/14 11:05
1,4-Dioxane	3.58	Baseline Event	jensend	05/14/14 11:05

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-22132-1

SDG No.: 200-22132

Instrument ID: CHZ.i

Analysis Batch Number: 72050

Lab Sample ID: CCVIS 200-72050/28

Client Sample ID:

Date Analyzed: 05/13/14 20:26

Lab File ID: Z7522_015.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.58	Baseline Event	jensend	05/14/14 11:05

Lab Sample ID: 200-22183-11

Client Sample ID:

Date Analyzed: 05/13/14 21:29

Lab File ID: Z7522_019.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.62	Baseline Event	jensend	05/14/14 11:08

Lab Sample ID: 200-22183-12

Client Sample ID:

Date Analyzed: 05/13/14 21:44

Lab File ID: Z7522_020.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.59	Baseline Event	jensend	05/14/14 11:09
1,4-Dioxane	3.56	Baseline Event	jensend	05/14/14 11:09

Lab Sample ID: CCVC 200-72050/30

Client Sample ID:

Date Analyzed: 05/13/14 22:31

Lab File ID: Z7522_023.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.58	Baseline Event	jensend	05/14/14 11:16

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-22132-1

SDG No.: 200-22132

Instrument ID: CHZ.i

Analysis Batch Number: 72100

Lab Sample ID: CCVIS 200-72100/2

Client Sample ID:

Date Analyzed: 05/14/14 12:06

Lab File ID: Z7545_002.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.58	Baseline Event	jensend	05/14/14 12:40

Lab Sample ID: 200-22183-5

Client Sample ID:

Date Analyzed: 05/14/14 12:42

Lab File ID: Z7545_003.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.63	Baseline Event	jensend	05/14/14 12:56
1,4-Dioxane-d8 (Surr)	3.54	Peak not found by the data system	jensend	05/14/14 12:56
1,4-Dioxane	3.58	Peak not found by the data system	jensend	05/14/14 12:56

Lab Sample ID: 200-22183-9

Client Sample ID:

Date Analyzed: 05/14/14 12:58

Lab File ID: Z7545_004.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.62	Baseline Event	jensend	05/15/14 09:52
1,4-Dioxane	3.57	Baseline Event	jensend	05/14/14 13:25

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-22132-1

SDG No.: 200-22132

Instrument ID: CHZ.i

Analysis Batch Number: 72137

Lab Sample ID: IC 200-72137/4

Client Sample ID:

Date Analyzed: 05/15/14 10:51

Lab File ID: Z7556_004.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.58	Baseline Event	jensend	05/15/14 12:36

Lab Sample ID: IC 200-72137/5

Client Sample ID:

Date Analyzed: 05/15/14 11:06

Lab File ID: Z7556_005.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.62	Baseline Event	jensend	05/15/14 12:37

Lab Sample ID: ICISAV 200-72137/6

Client Sample ID:

Date Analyzed: 05/15/14 11:22

Lab File ID: Z7556_006.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.58	Baseline Event	jensend	05/15/14 12:37

Lab Sample ID: IC 200-72137/7

Client Sample ID:

Date Analyzed: 05/15/14 11:38

Lab File ID: Z7556_007.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.60	Baseline Event	jensend	05/15/14 12:40
1,4-Dioxane	3.56	Baseline Event	jensend	05/15/14 12:38

Lab Sample ID: IC 200-72137/8

Client Sample ID:

Date Analyzed: 05/15/14 11:53

Lab File ID: Z7556_008.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran-d8	2.61	Baseline Event	jensend	05/15/14 12:43
1,4-Dioxane	3.57	Baseline Event	jensend	05/15/14 12:43

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Burlington

Job No.: 200-22132-1

SDG No.: 200-22132

Instrument ID: CHZ.i

Analysis Batch Number: 72137

Lab Sample ID: IC 200-72137/9

Client Sample ID:

Date Analyzed: 05/15/14 12:09

Lab File ID: Z7556_009.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.58	Baseline Event	jensend	05/15/14 12:40

Lab Sample ID: ICV 200-72137/10

Client Sample ID:

Date Analyzed: 05/15/14 12:45

Lab File ID: Z7556_010.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.58	Baseline Event	jensend	05/15/14 13:00

Lab Sample ID: 200-22183-10

Client Sample ID: MW-5S_050214

Date Analyzed: 05/15/14 13:01

Lab File ID: Z7556_011.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane-d8 (Surrogate)	3.54	Peak not found by the data system	jensend	05/15/14 13:14
1,4-Dioxane	3.58	Baseline Event	jensend	05/15/14 13:14

Lab Sample ID: CCVC 200-72137/12

Client Sample ID:

Date Analyzed: 05/15/14 13:16

Lab File ID: Z7556_012.D

GC Column: ZB-SVOA

ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	3.58	Baseline Event	jensend	05/15/14 13:28

SAMPLE SUMMARY

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
200-22132-1EB	EB-1_042914	Water	04/29/2014 1115	05/01/2014 1010
200-22132-2	MW-18S_042914	Water	04/29/2014 1207	05/01/2014 1010
200-22132-3FB	FB-1_042914	Water	04/29/2014 1600	05/01/2014 1010
200-22132-4EB	EB-2_042914	Water	04/29/2014 1620	05/01/2014 1010
200-22132-5TB	TRIP BLANK	Water	04/29/2014 0000	05/01/2014 1010
200-22132-6STOBL K	VHBLK01	Water	05/01/2014 1220	05/01/2014 1010
200-22155-1	EB-3_050114	Water	05/01/2014 0800	05/02/2014 1030
200-22155-2	MW-19D_050114	Water	05/01/2014 0935	05/02/2014 1030
200-22155-3	MW-16S_050114	Water	05/01/2014 0847	05/02/2014 1030
200-22155-4	MW-17S_050114	Water	05/01/2014 0954	05/02/2014 1030
200-22155-5	MW-17D_050114	Water	05/01/2014 1033	05/02/2014 1030
200-22155-6	MW-21D_050114	Water	05/01/2014 1040	05/02/2014 1030
200-22155-7	MW-21S_050114	Water	05/01/2014 1125	05/02/2014 1030
200-22155-8	MW-22D_050114	Water	05/01/2014 1345	05/02/2014 1030
200-22155-9	MW-20S_050114	Water	05/01/2014 1130	05/02/2014 1030
200-22155-10	MW-11D_050114	Water	05/01/2014 1500	05/02/2014 1030
200-22155-11	MW-5D_050114	Water	05/01/2014 1352	05/02/2014 1030
200-22155-11MS	MW-5D_050114	Water	05/01/2014 1352	05/02/2014 1030
200-22155-11MSD	MW-5D_050114	Water	05/01/2014 1352	05/02/2014 1030
200-22155-12	DUP_050114	Water	05/01/2014 1358	05/02/2014 1030
200-22155-13	MW-15D_050114	Water	05/01/2014 1513	05/02/2014 1030
200-22155-14	FB-2_050114	Water	05/01/2014 1540	05/02/2014 1030
200-22155-15TB	TRIP BLANK	Water	05/01/2014 0000	05/02/2014 1030
200-22183-1	MW-12S_050114	Water	05/01/2014 1607	05/03/2014 0950
200-22183-2	EB-4_050114	Water	05/01/2014 1635	05/03/2014 0950
200-22183-3	MW-24S_050114	Water	05/01/2014 1623	05/03/2014 0950
200-22183-4	EB-5_050214	Water	05/02/2014 0730	05/03/2014 0950
200-22183-5	MW-11S_050214	Water	05/02/2014 0836	05/03/2014 0950
200-22183-6	MW-12D_050214	Water	05/02/2014 0947	05/03/2014 0950
200-22183-7	MW-20D_050214	Water	05/02/2014 1052	05/03/2014 0950
200-22183-8	MW-15S_050214	Water	05/02/2014 0803	05/03/2014 0950
200-22183-9	MW-7S_050214	Water	05/02/2014 0858	05/03/2014 0950
200-22183-10	MW-5S_050214	Water	05/02/2014 0953	05/03/2014 0950
200-22183-11	EB-6_050214	Water	05/02/2014 1120	05/03/2014 0950
200-22183-12	FB-3_050214	Water	05/02/2014 1058	05/03/2014 0950
200-22183-13	TB_050214	Water	05/02/2014 1103	05/03/2014 0950

EXECUTIVE SUMMARY - Detections

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
200-22132-2 Bromomethane Toluene	MW-18S_042914	0.21 0.97	J B	0.50 0.50	ug/L ug/L	SOM01.2/VOA_Tr SOM01.2/VOA_Tr
200-22132-3FB Bromomethane Methylene chloride	FB-1_042914	0.21 0.36	J B J	0.50 0.50	ug/L ug/L	SOM01.2/VOA_Tr SOM01.2/VOA_Tr
200-22132-4EB Bromomethane Methylene chloride	EB-2_042914	0.23 0.37	J B J	0.50 0.50	ug/L ug/L	SOM01.2/VOA_Tr SOM01.2/VOA_Tr
200-22132-5TB Bromomethane Acetone	TRIP BLANK	0.13 2.8	J B J	0.50 5.0	ug/L ug/L	SOM01.2/VOA_Tr SOM01.2/VOA_Tr
200-22155-2 cis-1,2-Dichloroethene Toluene 1,4-Dioxane	MW-19D_050114	0.15 1.0 1.2	J 	0.50 0.50 0.19	ug/L ug/L ug/L	SOM01.2/VOA_Tr SOM01.2/VOA_Tr 522 MOD
200-22155-3 Bromomethane Methylcyclohexane Toluene	MW-16S_050114	0.17 0.087 0.93	J B J	0.50 0.50 0.50	ug/L ug/L ug/L	SOM01.2/VOA_Tr SOM01.2/VOA_Tr SOM01.2/VOA_Tr
200-22155-4 Trichloroethene Toluene	MW-17S_050114	0.37 0.52	J	0.50 0.50	ug/L ug/L	SOM01.2/VOA_Tr SOM01.2/VOA_Tr
200-22155-5 cis-1,2-Dichloroethene Trichloroethene Toluene Tetrachloroethene	MW-17D_050114	0.82 1.2 1.6 0.77		0.50 0.50 0.50 0.50	ug/L ug/L ug/L ug/L	SOM01.2/VOA_Tr SOM01.2/VOA_Tr SOM01.2/VOA_Tr SOM01.2/VOA_Tr

EXECUTIVE SUMMARY - Detections

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
200-22155-6	MW-21D_050114					
Acetone		3.0	J	5.0	ug/L	SOM01.2/VOA_Tr
cis-1,2-Dichloroethene		0.12	J	0.50	ug/L	SOM01.2/VOA_Tr
Trichloroethene		0.33	J	0.50	ug/L	SOM01.2/VOA_Tr
Toluene		2.2		0.50	ug/L	SOM01.2/VOA_Tr
200-22155-7	MW-21S_050114					
Acetone		3.3	J	5.0	ug/L	SOM01.2/VOA_Tr
trans-1,2-Dichloroethene		0.082	J	0.50	ug/L	SOM01.2/VOA_Tr
cis-1,2-Dichloroethene		5.0		0.50	ug/L	SOM01.2/VOA_Tr
Trichloroethene		3.5		0.50	ug/L	SOM01.2/VOA_Tr
Toluene		1.5		0.50	ug/L	SOM01.2/VOA_Tr
Tetrachloroethene		2.9		0.50	ug/L	SOM01.2/VOA_Tr
200-22155-8	MW-22D_050114					
1,4-Dioxane		5.9		0.19	ug/L	522 MOD
200-22155-9	MW-20S_050114					
Trichlorofluoromethane		0.15	J	0.50	ug/L	SOM01.2/VOA_Tr
1,1-Dichloroethene		4.0		0.50	ug/L	SOM01.2/VOA_Tr
trans-1,2-Dichloroethene		0.054	J	0.50	ug/L	SOM01.2/VOA_Tr
cis-1,2-Dichloroethene		1.4		0.50	ug/L	SOM01.2/VOA_Tr
1,1,1-Trichloroethane		3.9		0.50	ug/L	SOM01.2/VOA_Tr
Carbon tetrachloride		0.42	J	0.50	ug/L	SOM01.2/VOA_Tr
Trichloroethene		4.6		0.50	ug/L	SOM01.2/VOA_Tr
Toluene		1.0		0.50	ug/L	SOM01.2/VOA_Tr
Tetrachloroethene		4.9		0.50	ug/L	SOM01.2/VOA_Tr
200-22155-10	MW-11D_050114					
1,1-Dichloroethene		1.1		0.50	ug/L	SOM01.2/VOA_Tr
trans-1,2-Dichloroethene		0.097	J	0.50	ug/L	SOM01.2/VOA_Tr
cis-1,2-Dichloroethene		3.4		0.50	ug/L	SOM01.2/VOA_Tr
1,1,1-Trichloroethane		0.22	J	0.50	ug/L	SOM01.2/VOA_Tr
Carbon tetrachloride		0.22	J	0.50	ug/L	SOM01.2/VOA_Tr
Trichloroethene		3.7		0.50	ug/L	SOM01.2/VOA_Tr
Toluene		1.7		0.50	ug/L	SOM01.2/VOA_Tr
Tetrachloroethene		3.0		0.50	ug/L	SOM01.2/VOA_Tr

EXECUTIVE SUMMARY - Detections

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Lab Sample ID	Client Sample ID		Reporting			
Analyte		Result	Qualifier	Limit	Units	Method
200-22155-11	MW-5D_050114					
1,1-Dichloroethene		0.99		0.50	ug/L	SOM01.2/VOA_Tr
Acetone		2.6	J	5.0	ug/L	SOM01.2/VOA_Tr
1,1-Dichloroethane		0.63		0.50	ug/L	SOM01.2/VOA_Tr
cis-1,2-Dichloroethene		9.8		0.50	ug/L	SOM01.2/VOA_Tr
Trichloroethene		6.9		0.50	ug/L	SOM01.2/VOA_Tr
Toluene		1.3		0.50	ug/L	SOM01.2/VOA_Tr
Tetrachloroethene		0.41	J	0.50	ug/L	SOM01.2/VOA_Tr
1,4-Dioxane		2.8		0.19	ug/L	522 MOD
200-22155-12	DUP_050114					
1,1-Dichloroethene		1.0		0.50	ug/L	SOM01.2/VOA_Tr
1,1-Dichloroethane		0.61		0.50	ug/L	SOM01.2/VOA_Tr
cis-1,2-Dichloroethene		9.9		0.50	ug/L	SOM01.2/VOA_Tr
Trichloroethene		7.1		0.50	ug/L	SOM01.2/VOA_Tr
Toluene		1.3		0.50	ug/L	SOM01.2/VOA_Tr
Tetrachloroethene		0.42	J	0.50	ug/L	SOM01.2/VOA_Tr
1,4-Dioxane		3.0		0.19	ug/L	522 MOD
200-22155-13	MW-15D_050114					
1,1-Dichloroethene		4.6		0.50	ug/L	SOM01.2/VOA_Tr
1,1-Dichloroethane		0.27	J	0.50	ug/L	SOM01.2/VOA_Tr
cis-1,2-Dichloroethene		2.9		0.50	ug/L	SOM01.2/VOA_Tr
1,1,1-Trichloroethane		1.7		0.50	ug/L	SOM01.2/VOA_Tr
Carbon tetrachloride		0.13	J	0.50	ug/L	SOM01.2/VOA_Tr
Trichloroethene		18		0.50	ug/L	SOM01.2/VOA_Tr
Toluene		1.4		0.50	ug/L	SOM01.2/VOA_Tr
Tetrachloroethene		2.8		0.50	ug/L	SOM01.2/VOA_Tr
1,4-Dioxane		4.0		0.19	ug/L	522 MOD
200-22155-14	FB-2_050114					
Acetone		16		5.0	ug/L	SOM01.2/VOA_Tr
Methylene chloride		0.38	J	0.50	ug/L	SOM01.2/VOA_Tr
2-Butanone		8.7		5.0	ug/L	SOM01.2/VOA_Tr
Toluene		0.083	J	0.50	ug/L	SOM01.2/VOA_Tr
Ethylbenzene		0.40	J	0.50	ug/L	SOM01.2/VOA_Tr
1,4-Dioxane		0.63		0.19	ug/L	522 MOD
200-22155-15TB	TRIP BLANK					
Acetone		3.3	J	5.0	ug/L	SOM01.2/VOA_Tr

EXECUTIVE SUMMARY - Detections

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Lab Sample ID	Client Sample ID		Result	Qualifier	Reporting Limit	Units	Method
200-22183-1	MW-12S_050114						
Bromomethane		0.073	J B	0.50	ug/L		SOM01.2/VOA_Tr
Trichlorofluoromethane		0.31	J	0.50	ug/L		SOM01.2/VOA_Tr
1,1-Dichloroethene		16	D	0.85	ug/L		SOM01.2/VOA_Tr
trans-1,2-Dichloroethene		0.22	J	0.50	ug/L		SOM01.2/VOA_Tr
1,1-Dichloroethane		5.4		0.50	ug/L		SOM01.2/VOA_Tr
cis-1,2-Dichloroethene		21	D	0.85	ug/L		SOM01.2/VOA_Tr
1,1,1-Trichloroethane		9.3		0.50	ug/L		SOM01.2/VOA_Tr
Carbon tetrachloride		0.39	J	0.50	ug/L		SOM01.2/VOA_Tr
Trichloroethene		15	D	0.85	ug/L		SOM01.2/VOA_Tr
Toluene		0.62		0.50	ug/L		SOM01.2/VOA_Tr
Tetrachloroethene		6.1		0.50	ug/L		SOM01.2/VOA_Tr
1,4-Dioxane		10		0.19	ug/L		522 MOD
200-22183-2	EB-4_050114						
Methylene chloride		0.27	J	0.50	ug/L		SOM01.2/VOA_Tr
1,4-Dioxane		0.61		0.19	ug/L		522 MOD
200-22183-3	MW-24S_050114						
Bromomethane		0.24	J B	0.50	ug/L		SOM01.2/VOA_Tr
1,1-Dichloroethene		2.4		0.50	ug/L		SOM01.2/VOA_Tr
trans-1,2-Dichloroethene		0.22	J	0.50	ug/L		SOM01.2/VOA_Tr
cis-1,2-Dichloroethene		9.9	D	1.4	ug/L		SOM01.2/VOA_Tr
1,1,1-Trichloroethane		2.7		0.50	ug/L		SOM01.2/VOA_Tr
Trichloroethene		11	D	1.4	ug/L		SOM01.2/VOA_Tr
Toluene		0.49	J	0.50	ug/L		SOM01.2/VOA_Tr
Tetrachloroethene		5.3		0.50	ug/L		SOM01.2/VOA_Tr
1,4-Dioxane		1.3		0.19	ug/L		522 MOD
200-22183-4	EB-5_050214						
1,4-Dioxane		0.58		0.19	ug/L		522 MOD

EXECUTIVE SUMMARY - Detections

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
200-22183-5	MW-11S_050214					
Chloroethane		11		4.2	ug/L	SOM01.2/VOA_Tr
Trichlorofluoromethane		1.2	J	4.2	ug/L	SOM01.2/VOA_Tr
1,1-Dichloroethene		180	D	21	ug/L	SOM01.2/VOA_Tr
trans-1,2-Dichloroethene		1.7	J	4.2	ug/L	SOM01.2/VOA_Tr
1,1-Dichloroethane		190	D	21	ug/L	SOM01.2/VOA_Tr
cis-1,2-Dichloroethene		690	D	21	ug/L	SOM01.2/VOA_Tr
1,1,1-Trichloroethane		270	D	21	ug/L	SOM01.2/VOA_Tr
Trichloroethene		200	D	21	ug/L	SOM01.2/VOA_Tr
Toluene		0.81	J	4.2	ug/L	SOM01.2/VOA_Tr
Tetrachloroethene		17		4.2	ug/L	SOM01.2/VOA_Tr
1,4-Dioxane		120		1.9	ug/L	522 MOD
200-22183-6	MW-12D_050214					
1,1-Dichloroethene		0.92		0.50	ug/L	SOM01.2/VOA_Tr
trans-1,2-Dichloroethene		1.4		0.50	ug/L	SOM01.2/VOA_Tr
cis-1,2-Dichloroethene		60	D	1.6	ug/L	SOM01.2/VOA_Tr
Trichloroethene		28	D	1.6	ug/L	SOM01.2/VOA_Tr
Toluene		1.4		0.50	ug/L	SOM01.2/VOA_Tr
Tetrachloroethene		5.0		0.50	ug/L	SOM01.2/VOA_Tr
200-22183-7	MW-20D_050214					
Vinyl chloride		33		2.7	ug/L	SOM01.2/VOA_Tr
1,1-Dichloroethene		28		2.7	ug/L	SOM01.2/VOA_Tr
trans-1,2-Dichloroethene		2.2	J	2.7	ug/L	SOM01.2/VOA_Tr
1,1-Dichloroethane		11		2.7	ug/L	SOM01.2/VOA_Tr
cis-1,2-Dichloroethene		340	D	13	ug/L	SOM01.2/VOA_Tr
Chloroform		1.2	J	2.7	ug/L	SOM01.2/VOA_Tr
1,1,1-Trichloroethane		5.2		2.7	ug/L	SOM01.2/VOA_Tr
Trichloroethene		140	D	13	ug/L	SOM01.2/VOA_Tr
Toluene		1.4	J	2.7	ug/L	SOM01.2/VOA_Tr
Tetrachloroethene		37		2.7	ug/L	SOM01.2/VOA_Tr
1,4-Dioxane		7.7		0.19	ug/L	522 MOD

EXECUTIVE SUMMARY - Detections

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
200-22183-8	MW-15S_050214					
Trichlorofluoromethane		3.3	J	3.8	ug/L	SOM01.2/VOA_Tr
1,1-Dichloroethene		380	D	13	ug/L	SOM01.2/VOA_Tr
1,1-Dichloroethane		3.0	J	3.8	ug/L	SOM01.2/VOA_Tr
cis-1,2-Dichloroethene		41		3.8	ug/L	SOM01.2/VOA_Tr
1,1,1-Trichloroethane		93		3.8	ug/L	SOM01.2/VOA_Tr
Trichloroethene		130		3.8	ug/L	SOM01.2/VOA_Tr
Toluene		0.60	J	3.8	ug/L	SOM01.2/VOA_Tr
Tetrachloroethene		4.4		3.8	ug/L	SOM01.2/VOA_Tr
1,4-Dioxane		7.7		0.20	ug/L	522 MOD
200-22183-9	MW-7S_050214					
1,1-Dichloroethene		48		7.0	ug/L	SOM01.2/VOA_Tr
1,1-Dichloroethane		7.7		7.0	ug/L	SOM01.2/VOA_Tr
cis-1,2-Dichloroethene		190		7.0	ug/L	SOM01.2/VOA_Tr
1,1,1-Trichloroethane		61		7.0	ug/L	SOM01.2/VOA_Tr
Trichloroethene		1000	D	35	ug/L	SOM01.2/VOA_Tr
Tetrachloroethene		150		7.0	ug/L	SOM01.2/VOA_Tr
1,4-Dioxane		29		0.48	ug/L	522 MOD
200-22183-10	MW-5S_050214					
1,1-Dichloroethene		700		66	ug/L	SOM01.2/VOA_Tr
trans-1,2-Dichloroethene		26	J	66	ug/L	SOM01.2/VOA_Tr
1,1-Dichloroethane		140		66	ug/L	SOM01.2/VOA_Tr
cis-1,2-Dichloroethene		7700	D	330	ug/L	SOM01.2/VOA_Tr
1,1,1-Trichloroethane		930		66	ug/L	SOM01.2/VOA_Tr
Trichloroethene		9200	D	330	ug/L	SOM01.2/VOA_Tr
Tetrachloroethene		67		66	ug/L	SOM01.2/VOA_Tr
1,4-Dioxane		470		6.2	ug/L	522 MOD
200-22183-11	EB-6_050214					
Acetone		20		5.0	ug/L	SOM01.2/VOA_Tr
Methylene chloride		0.34	J	0.50	ug/L	SOM01.2/VOA_Tr
2-Butanone		13		5.0	ug/L	SOM01.2/VOA_Tr
Toluene		0.14	J	0.50	ug/L	SOM01.2/VOA_Tr
Ethylbenzene		0.28	J	0.50	ug/L	SOM01.2/VOA_Tr
1,4-Dioxane		0.84		0.19	ug/L	522 MOD

EXECUTIVE SUMMARY - Detections

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Lab Sample ID	Client Sample ID	Reporting				Method
Analyte		Result	Qualifier	Limit	Units	
200-22183-12	FB-3_050214					
Acetone		19		5.0	ug/L	SOM01.2/VOA_Tr
Methylene chloride		0.37	J	0.50	ug/L	SOM01.2/VOA_Tr
2-Butanone		14		5.0	ug/L	SOM01.2/VOA_Tr
Toluene		0.12	J	0.50	ug/L	SOM01.2/VOA_Tr
Ethylbenzene		0.40	J	0.50	ug/L	SOM01.2/VOA_Tr
1,4-Dioxane		0.74		0.19	ug/L	522 MOD

METHOD SUMMARY

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Trace Water Volatile sample preservation, Field Preserved Water	TAL BUR	SOM01.2 SOM01.2/VOA_Tr SOM01.2 SOM01.2/VOA_PR	
1,4 Dioxane (GC/MS SIM) Solid Phase Extraction (SPE)	TAL BUR TAL BUR	EPA 522 MOD SW846 3535A	

Lab References:

TAL BUR = TestAmerica Burlington

Method References:

EPA = US Environmental Protection Agency

SOM01.2 = U.S. Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Method	Analyst	Analyst ID
SOM01.2 SOM01.2/VOA_Tr	Wilbur, Janelle S	JSW
EPA 522 MOD	Jensen, David G	DGJ

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-18S_042914

Lab Sample ID: 200-22132-2

Date Sampled: 04/29/2014 1207

Client Matrix: Water

Date Received: 05/01/2014 1010

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla07.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1331			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1331				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.21	J B	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.50	U	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	0.50	U	0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	0.97		0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.50	U	0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-18S_042914

Lab Sample ID: 200-22132-2

Date Sampled: 04/29/2014 1207

Client Matrix: Water

Date Received: 05/01/2014 1010

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla07.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1331			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1331				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	103		65 - 131
Chloroethane-d5	101		71 - 131
1,1-Dichloroethene-d2	79		55 - 104
2-Butanone-d5	88		49 - 155
Chloroform-d	94		78 - 121
1,2-Dichloroethane-d4	100		78 - 129
Benzene-d6	101		77 - 124
1,2-Dichloropropane-d6	84		79 - 124
Toluene-d8	100		77 - 121
trans-1,3-Dichloropropene-d4	96		73 - 121
2-Hexanone-d5	96		28 - 135
1,1,2,2-Tetrachloroethane-d2	92		73 - 125
1,2-Dichlorobenzene-d4	94		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-18S_042914

Lab Sample ID: 200-22132-2

Date Sampled: 04/29/2014 1207

Client Matrix: Water

Date Received: 05/01/2014 1010

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla07.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1331			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1331				

Tentatively Identified Compounds

Tentatively Identified Compounds		Number TIC's Found:	4	
Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	4.64	0.55	J
	Unknown	7.43	3.0	J B
541-05-9	Cyclotrisiloxane, hexamethyl-	8.35	1.1	J N
556-67-2	Cyclotetrasiloxane, octamethyl-	11.17	1.9	J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: FB-1_042914

Lab Sample ID: 200-22132-3FB

Client Matrix: Water

Date Sampled: 04/29/2014 1600
Date Received: 05/01/2014 1010**SOM01.2/VOA_Tr Trace Water**

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla08.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1356			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1356				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.21	J B	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.50	U	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.36	J	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	0.50	U	0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	0.50	U	0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.50	U	0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: FB-1_042914

Lab Sample ID: 200-22132-3FB

Client Matrix: Water

Date Sampled: 04/29/2014 1600
Date Received: 05/01/2014 1010

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla08.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1356			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1356				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	104		65 - 131
Chloroethane-d5	101		71 - 131
1,1-Dichloroethene-d2	80		55 - 104
2-Butanone-d5	90		49 - 155
Chloroform-d	97		78 - 121
1,2-Dichloroethane-d4	102		78 - 129
Benzene-d6	100		77 - 124
1,2-Dichloropropane-d6	85		79 - 124
Toluene-d8	100		77 - 121
trans-1,3-Dichloropropene-d4	95		73 - 121
2-Hexanone-d5	95		28 - 135
1,1,2,2-Tetrachloroethane-d2	91		73 - 125
1,2-Dichlorobenzene-d4	95		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: FB-1_042914

Lab Sample ID: 200-22132-3FB

Client Matrix: Water

Date Sampled: 04/29/2014 1600
Date Received: 05/01/2014 1010

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla08.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1356			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1356				

Tentatively Identified Compounds

		Number TIC's Found:	4	
Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
541-05-9	Unknown	4.64	0.79	J
	Unknown	7.43	3.0	J B
	Cyclotrisiloxane, hexamethyl-	8.35	1.5	J N
	Unknown	11.17	2.0	J

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: EB-2_042914

Lab Sample ID: 200-22132-4EB

Date Sampled: 04/29/2014 1620

Client Matrix: Water

Date Received: 05/01/2014 1010

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla09.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1420			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1420				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.23	J B	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.50	U	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.37	J	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	0.50	U	0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	0.50	U	0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.50	U	0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: EB-2_042914

Lab Sample ID: 200-22132-4EB

Date Sampled: 04/29/2014 1620

Client Matrix: Water

Date Received: 05/01/2014 1010

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla09.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1420			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1420				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	105		65 - 131
Chloroethane-d5	103		71 - 131
1,1-Dichloroethene-d2	80		55 - 104
2-Butanone-d5	91		49 - 155
Chloroform-d	97		78 - 121
1,2-Dichloroethane-d4	102		78 - 129
Benzene-d6	101		77 - 124
1,2-Dichloropropane-d6	85		79 - 124
Toluene-d8	101		77 - 121
trans-1,3-Dichloropropene-d4	96		73 - 121
2-Hexanone-d5	97		28 - 135
1,1,2,2-Tetrachloroethane-d2	94		73 - 125
1,2-Dichlorobenzene-d4	94		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: EB-2_042914

Lab Sample ID: 200-22132-4EB

Date Sampled: 04/29/2014 1620

Client Matrix: Water

Date Received: 05/01/2014 1010

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dll09.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1420			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1420				

Tentatively Identified Compounds

Tentatively Identified Compounds		Number TIC's Found:	3	
Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	3.1	J B
541-05-9	Cyclotrisiloxane, hexamethyl-	8.35	1.2	J N
556-67-2	Cyclotetrasiloxane, octamethyl-	11.17	1.5	J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: TRIP BLANK

Lab Sample ID: 200-22132-5TB
Client Matrix: WaterDate Sampled: 04/29/2014 0000
Date Received: 05/01/2014 1010**SOM01.2/VOA_Tr Trace Water**

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla10.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1445			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1445				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.13	J B	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.50	U	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	2.8	J	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	0.50	U	0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	0.50	U	0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.50	U	0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: TRIP BLANK

Lab Sample ID: 200-22132-5TB

Date Sampled: 04/29/2014 0000

Client Matrix: Water

Date Received: 05/01/2014 1010

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla10.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1445			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1445				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	107		65 - 131
Chloroethane-d5	105		71 - 131
1,1-Dichloroethene-d2	82		55 - 104
2-Butanone-d5	95		49 - 155
Chloroform-d	100		78 - 121
1,2-Dichloroethane-d4	106		78 - 129
Benzene-d6	103		77 - 124
1,2-Dichloropropane-d6	87		79 - 124
Toluene-d8	102		77 - 121
trans-1,3-Dichloropropene-d4	98		73 - 121
2-Hexanone-d5	99		28 - 135
1,1,2,2-Tetrachloroethane-d2	95		73 - 125
1,2-Dichlorobenzene-d4	95		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: TRIP BLANK

Lab Sample ID: 200-22132-5TB

Date Sampled: 04/29/2014 0000

Client Matrix: Water

Date Received: 05/01/2014 1010

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla10.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1445			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1445				

Tentatively Identified Compounds **Number TIC's Found: 3**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	3.1	B J
541-05-9	Cyclotrisiloxane, hexamethyl-	8.35	0.99	J N
	Unknown	11.17	1.3	J

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: VHBLK01

Lab Sample ID: 200-22132-6STOBLK

Date Sampled: 05/01/2014 1220

Client Matrix: Water

Date Received: 05/01/2014 1010

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72110	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlm15.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/14/2014 1312			Final Weight/Volume:	25 mL
Prep Date:	05/14/2014 1312				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.50	U	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.50	U	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	0.50	U	0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	0.50	U	0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.50	U	0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: VHBLK01

Lab Sample ID: 200-22132-6STOBLK

Date Sampled: 05/01/2014 1220

Client Matrix: Water

Date Received: 05/01/2014 1010

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72110	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	d1m15.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/14/2014 1312			Final Weight/Volume:	25 mL
Prep Date:	05/14/2014 1312				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	111		65 - 131
Chloroethane-d5	104		71 - 131
1,1-Dichloroethene-d2	78		55 - 104
2-Butanone-d5	104		49 - 155
Chloroform-d	98		78 - 121
1,2-Dichloroethane-d4	103		78 - 129
Benzene-d6	104		77 - 124
1,2-Dichloropropane-d6	87		79 - 124
Toluene-d8	104		77 - 121
trans-1,3-Dichloropropene-d4	102		73 - 121
2-Hexanone-d5	108		28 - 135
1,1,2,2-Tetrachloroethane-d2	95		73 - 125
1,2-Dichlorobenzene-d4	98		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: VHBLK01

Lab Sample ID: 200-22132-6STOBLK

Date Sampled: 05/01/2014 1220

Client Matrix: Water

Date Received: 05/01/2014 1010

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72110	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	d1m15.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/14/2014 1312			Final Weight/Volume:	25 mL
Prep Date:	05/14/2014 1312				

Tentatively Identified Compounds Number TIC's Found: 4

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	4.64	0.65	H J
	Unknown	7.43	3.1	B H J
	Unknown	8.35	0.62	H J
	Unknown	11.17	0.96	H J

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-19D_050114

Lab Sample ID: 200-22155-2

Date Sampled: 05/01/2014 0935

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla11.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1509			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1509				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.50	U	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.50	U	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	0.15	J	0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	0.50	U	0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	1.0		0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.50	U	0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-19D_050114

Lab Sample ID: 200-22155-2

Date Sampled: 05/01/2014 0935

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlia11.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1509			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1509				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	108		65 - 131
Chloroethane-d5	106		71 - 131
1,1-Dichloroethene-d2	82		55 - 104
2-Butanone-d5	100		49 - 155
Chloroform-d	100		78 - 121
1,2-Dichloroethane-d4	110		78 - 129
Benzene-d6	102		77 - 124
1,2-Dichloropropane-d6	88		79 - 124
Toluene-d8	102		77 - 121
trans-1,3-Dichloropropene-d4	96		73 - 121
2-Hexanone-d5	104		28 - 135
1,1,2,2-Tetrachloroethane-d2	100		73 - 125
1,2-Dichlorobenzene-d4	99		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-19D_050114

Lab Sample ID: 200-22155-2

Date Sampled: 05/01/2014 0935

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla11.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1509			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1509				

Tentatively Identified Compounds **Number TIC's Found: 3**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	3.1	B J
541-05-9	Cyclotrisiloxane, hexamethyl-	8.35	0.90	J N
	Unknown	11.17	1.3	J

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
Total Alkanes			

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-16S_050114

Lab Sample ID: 200-22155-3

Date Sampled: 05/01/2014 0847

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla12.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1534			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1534				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.17	J B	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.50	U	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	0.50	U	0.080	0.50
Methylcyclohexane	0.087	J	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	0.93		0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.50	U	0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-16S_050114

Lab Sample ID: 200-22155-3

Date Sampled: 05/01/2014 0847

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlia12.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1534			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1534				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	105		65 - 131
Chloroethane-d5	105		71 - 131
1,1-Dichloroethene-d2	80		55 - 104
2-Butanone-d5	98		49 - 155
Chloroform-d	98		78 - 121
1,2-Dichloroethane-d4	110		78 - 129
Benzene-d6	102		77 - 124
1,2-Dichloropropane-d6	88		79 - 124
Toluene-d8	102		77 - 121
trans-1,3-Dichloropropene-d4	95		73 - 121
2-Hexanone-d5	105		28 - 135
1,1,2,2-Tetrachloroethane-d2	100		73 - 125
1,2-Dichlorobenzene-d4	97		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132Client Sample ID: **MW-16S_050114**

Lab Sample ID: 200-22155-3

Date Sampled: 05/01/2014 0847

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla12.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1534			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1534				

Tentatively Identified Compounds **Number TIC's Found: 3**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	3.0	J B
541-05-9	Cyclotrisiloxane, hexamethyl-	8.35	0.91	J N
556-67-2	Cyclotetrasiloxane, octamethyl-	11.17	1.3	J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-17S_050114

Lab Sample ID: 200-22155-4

Date Sampled: 05/01/2014 0954

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla13.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1558			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1558				

Analyst	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.50	U	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.50	U	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	0.37	J	0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	0.52		0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.50	U	0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-17S_050114

Lab Sample ID: 200-22155-4

Date Sampled: 05/01/2014 0954

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla13.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1558			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1558				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	95		65 - 131
Chloroethane-d5	98		71 - 131
1,1-Dichloroethene-d2	77		55 - 104
2-Butanone-d5	89		49 - 155
Chloroform-d	94		78 - 121
1,2-Dichloroethane-d4	98		78 - 129
Benzene-d6	98		77 - 124
1,2-Dichloropropane-d6	82		79 - 124
Toluene-d8	97		77 - 121
trans-1,3-Dichloropropene-d4	88		73 - 121
2-Hexanone-d5	92		28 - 135
1,1,2,2-Tetrachloroethane-d2	90		73 - 125
1,2-Dichlorobenzene-d4	93		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-17S_050114

Lab Sample ID: 200-22155-4

Date Sampled: 05/01/2014 0954

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla13.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1558			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1558				

Tentatively Identified Compounds **Number TIC's Found: 3**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	2.8	J B
541-05-9	Cyclotrisiloxane, hexamethyl-	8.35	0.77	J N
	Unknown	11.17	0.98	J

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-17D_050114

Lab Sample ID: 200-22155-5

Date Sampled: 05/01/2014 1033

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla14.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1623			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1623				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.50	U	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.50	U	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	0.82		0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	1.2		0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	1.6		0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.77		0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-17D_050114

Lab Sample ID: 200-22155-5

Date Sampled: 05/01/2014 1033

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dll14.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1623			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1623				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	99		65 - 131
Chloroethane-d5	103		71 - 131
1,1-Dichloroethene-d2	81		55 - 104
2-Butanone-d5	96		49 - 155
Chloroform-d	98		78 - 121
1,2-Dichloroethane-d4	107		78 - 129
Benzene-d6	100		77 - 124
1,2-Dichloropropane-d6	87		79 - 124
Toluene-d8	98		77 - 121
trans-1,3-Dichloropropene-d4	93		73 - 121
2-Hexanone-d5	99		28 - 135
1,1,2,2-Tetrachloroethane-d2	98		73 - 125
1,2-Dichlorobenzene-d4	96		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-17D_050114

Lab Sample ID: 200-22155-5

Date Sampled: 05/01/2014 1033

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla14.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1623			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1623				

Tentatively Identified Compounds

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	3.1	J B
541-05-9	Cyclotrisiloxane, hexamethyl-	8.35	0.73	J N
556-67-2	Cyclotetrasiloxane, octamethyl-	11.17	0.96	J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
Total Alkanes			

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-21D_050114

Lab Sample ID: 200-22155-6

Date Sampled: 05/01/2014 1040

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla15.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1647			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1647				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.50	U	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.50	U	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	3.0	J	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	0.12	J	0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	0.33	J	0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	2.2		0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.50	U	0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-21D_050114

Lab Sample ID: 200-22155-6

Date Sampled: 05/01/2014 1040

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla15.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1647			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1647				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	100		65 - 131
Chloroethane-d5	105		71 - 131
1,1-Dichloroethene-d2	81		55 - 104
2-Butanone-d5	96		49 - 155
Chloroform-d	97		78 - 121
1,2-Dichloroethane-d4	109		78 - 129
Benzene-d6	101		77 - 124
1,2-Dichloropropane-d6	86		79 - 124
Toluene-d8	100		77 - 121
trans-1,3-Dichloropropene-d4	94		73 - 121
2-Hexanone-d5	101		28 - 135
1,1,2,2-Tetrachloroethane-d2	95		73 - 125
1,2-Dichlorobenzene-d4	95		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-21D_050114

Lab Sample ID: 200-22155-6

Date Sampled: 05/01/2014 1040

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla15.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1647			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1647				

Tentatively Identified Compounds

Number TIC's Found: 4

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	3.1	J B
541-05-9	Cyclotrisiloxane, hexamethyl-	8.35	0.51	J N
	Unknown	11.17	0.72	J
	Unknown alkane	12.07	0.51	J

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes	0.51	J

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-21S_050114

Lab Sample ID: 200-22155-7

Date Sampled: 05/01/2014 1125

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla16.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1712			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1712				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.50	U	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.50	U	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	3.3	J	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.082	J	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	5.0		0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	3.5		0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	1.5		0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	2.9		0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-21S_050114

Lab Sample ID: 200-22155-7

Date Sampled: 05/01/2014 1125

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla16.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1712			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1712				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	100		65 - 131
Chloroethane-d5	105		71 - 131
1,1-Dichloroethene-d2	82		55 - 104
2-Butanone-d5	99		49 - 155
Chloroform-d	100		78 - 121
1,2-Dichloroethane-d4	108		78 - 129
Benzene-d6	101		77 - 124
1,2-Dichloropropane-d6	89		79 - 124
Toluene-d8	100		77 - 121
trans-1,3-Dichloropropene-d4	96		73 - 121
2-Hexanone-d5	101		28 - 135
1,1,2,2-Tetrachloroethane-d2	98		73 - 125
1,2-Dichlorobenzene-d4	99		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-21S_050114

Lab Sample ID: 200-22155-7

Date Sampled: 05/01/2014 1125

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dll16.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1712			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1712				

Tentatively Identified Compounds

Tentatively Identified Compounds		Number TIC's Found:	2	
Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	3.1	J B
556-67-2	Cyclotetrasiloxane, octamethyl-	11.17	0.69	J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-20S_050114

Lab Sample ID: 200-22155-9

Date Sampled: 05/01/2014 1130

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla17.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1737			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1737				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.50	U	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.15	J	0.099	0.50
1,1-Dichloroethene	4.0		0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.054	J	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	1.4		0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	3.9		0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.42	J	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	4.6		0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	1.0		0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	4.9		0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-20S_050114

Lab Sample ID: 200-22155-9

Date Sampled: 05/01/2014 1130

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlia17.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1737			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1737				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	96		65 - 131
Chloroethane-d5	103		71 - 131
1,1-Dichloroethene-d2	100		55 - 104
2-Butanone-d5	98		49 - 155
Chloroform-d	97		78 - 121
1,2-Dichloroethane-d4	108		78 - 129
Benzene-d6	99		77 - 124
1,2-Dichloropropane-d6	87		79 - 124
Toluene-d8	99		77 - 121
trans-1,3-Dichloropropene-d4	96		73 - 121
2-Hexanone-d5	104		28 - 135
1,1,2,2-Tetrachloroethane-d2	99		73 - 125
1,2-Dichlorobenzene-d4	97		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-20S_050114

Lab Sample ID: 200-22155-9

Date Sampled: 05/01/2014 1130

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla17.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1737			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1737				

Tentatively Identified Compounds **Number TIC's Found: 2**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	3.1	J B
556-67-2	Cyclotetrasiloxane, octamethyl-	11.17	0.60	J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-11D_050114

Lab Sample ID: 200-22155-10

Date Sampled: 05/01/2014 1500

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dll18.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1801			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1801				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.50	U	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	1.1		0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.097	J	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	3.4		0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.22	J	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.22	J	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	3.7		0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	1.7		0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	3.0		0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-11D_050114

Lab Sample ID: 200-22155-10

Date Sampled: 05/01/2014 1500

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla18.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1801			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1801				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	102		65 - 131
Chloroethane-d5	106		71 - 131
1,1-Dichloroethene-d2	87		55 - 104
2-Butanone-d5	101		49 - 155
Chloroform-d	101		78 - 121
1,2-Dichloroethane-d4	110		78 - 129
Benzene-d6	101		77 - 124
1,2-Dichloropropane-d6	87		79 - 124
Toluene-d8	100		77 - 121
trans-1,3-Dichloropropene-d4	93		73 - 121
2-Hexanone-d5	103		28 - 135
1,1,2,2-Tetrachloroethane-d2	99		73 - 125
1,2-Dichlorobenzene-d4	99		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-11D_050114

Lab Sample ID: 200-22155-10

Date Sampled: 05/01/2014 1500

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla18.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1801			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1801				

Tentatively Identified Compounds **Number TIC's Found: 2**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	3.0	J B
556-67-2	Cyclotetrasiloxane, octamethyl-	11.17	0.61	J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-5D_050114

Lab Sample ID: 200-22155-11

Date Sampled: 05/01/2014 1352

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla19.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1826			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1826				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.50	U	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.99		0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	2.6	J	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.63		0.075	0.50
cis-1,2-Dichloroethene	9.8		0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	6.9		0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	1.3		0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.41	J	0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-5D_050114

Lab Sample ID: 200-22155-11

Date Sampled: 05/01/2014 1352

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla19.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1826			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1826				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	101		65 - 131
Chloroethane-d5	102		71 - 131
1,1-Dichloroethene-d2	83		55 - 104
2-Butanone-d5	99		49 - 155
Chloroform-d	98		78 - 121
1,2-Dichloroethane-d4	108		78 - 129
Benzene-d6	99		77 - 124
1,2-Dichloropropane-d6	85		79 - 124
Toluene-d8	99		77 - 121
trans-1,3-Dichloropropene-d4	90		73 - 121
2-Hexanone-d5	101		28 - 135
1,1,2,2-Tetrachloroethane-d2	97		73 - 125
1,2-Dichlorobenzene-d4	97		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-5D_050114

Lab Sample ID: 200-22155-11

Date Sampled: 05/01/2014 1352

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla19.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1826			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1826				

Tentatively Identified Compounds **Number TIC's Found:** **1**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	2.9	B J

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: DUP_050114

Lab Sample ID: 200-22155-12

Date Sampled: 05/01/2014 1358

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla22.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1940			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1940				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.50	U	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorodifluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	1.0		0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.61		0.075	0.50
cis-1,2-Dichloroethene	9.9		0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	7.1		0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	1.3		0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.42	J	0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: DUP_050114

Lab Sample ID: 200-22155-12

Date Sampled: 05/01/2014 1358

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla22.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1940			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1940				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	102		65 - 131
Chloroethane-d5	102		71 - 131
1,1-Dichloroethene-d2	84		55 - 104
2-Butanone-d5	94		49 - 155
Chloroform-d	98		78 - 121
1,2-Dichloroethane-d4	107		78 - 129
Benzene-d6	99		77 - 124
1,2-Dichloropropane-d6	84		79 - 124
Toluene-d8	99		77 - 121
trans-1,3-Dichloropropene-d4	88		73 - 121
2-Hexanone-d5	98		28 - 135
1,1,2,2-Tetrachloroethane-d2	90		73 - 125
1,2-Dichlorobenzene-d4	94		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: DUP_050114

Lab Sample ID: 200-22155-12

Date Sampled: 05/01/2014 1358

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla22.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 1940			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 1940				

Tentatively Identified Compounds **Number TIC's Found: 2**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	2.8	J B
556-67-2	Cyclotetrasiloxane, octamethyl-	11.17	0.65	J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-15D_050114

Lab Sample ID: 200-22155-13

Client Matrix: Water

Date Sampled: 05/01/2014 1513
Date Received: 05/02/2014 1030**SOM01.2/VOA_Tr Trace Water**

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla23.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 2004			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 2004				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.50	U	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	4.6		0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.27	J	0.075	0.50
cis-1,2-Dichloroethene	2.9		0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	1.7		0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.13	J	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	18		0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	1.4		0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	2.8		0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-15D_050114

Lab Sample ID: 200-22155-13

Date Sampled: 05/01/2014 1513

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla23.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 2004			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 2004				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	107		65 - 131
Chloroethane-d5	108		71 - 131
1,1-Dichloroethene-d2	105	X	55 - 104
2-Butanone-d5	98		49 - 155
Chloroform-d	100		78 - 121
1,2-Dichloroethane-d4	113		78 - 129
Benzene-d6	101		77 - 124
1,2-Dichloropropane-d6	88		79 - 124
Toluene-d8	101		77 - 121
trans-1,3-Dichloropropene-d4	90		73 - 121
2-Hexanone-d5	103		28 - 135
1,1,2,2-Tetrachloroethane-d2	93		73 - 125
1,2-Dichlorobenzene-d4	100		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-15D_050114

Lab Sample ID: 200-22155-13

Date Sampled: 05/01/2014 1513

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla23.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 2004			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 2004				

Tentatively Identified Compounds **Number TIC's Found:** **1**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	2.9	J B

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: FB-2_050114

Lab Sample ID: 200-22155-14

Date Sampled: 05/01/2014 1540

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla24.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 2029			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 2029				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.50	U	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.50	U	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	16		0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.38	J	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	8.7		0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	0.50	U	0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	0.083	J	0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.50	U	0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.40	J	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: FB-2_050114

Lab Sample ID: 200-22155-14

Date Sampled: 05/01/2014 1540

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla24.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 2029			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 2029				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	104		65 - 131
Chloroethane-d5	108		71 - 131
1,1-Dichloroethene-d2	82		55 - 104
2-Butanone-d5	97		49 - 155
Chloroform-d	99		78 - 121
1,2-Dichloroethane-d4	107		78 - 129
Benzene-d6	100		77 - 124
1,2-Dichloropropane-d6	86		79 - 124
Toluene-d8	101		77 - 121
trans-1,3-Dichloropropene-d4	92		73 - 121
2-Hexanone-d5	98		28 - 135
1,1,2,2-Tetrachloroethane-d2	95		73 - 125
1,2-Dichlorobenzene-d4	97		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: FB-2_050114

Lab Sample ID: 200-22155-14

Date Sampled: 05/01/2014 1540

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method: SOM01.2/VOA_Tr
Prep Method: SOM01.2/VOA_PR
Dilution: 1.0
Analysis Date: 05/08/2014 2029
Prep Date: 05/08/2014 2029

Analysis Batch: 200-71915
Prep Batch: N/A

Instrument ID: D.i
Lab File ID: dll24.d
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Tentatively Identified Compounds

Number TIC's Found: 2

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	2.9	J B
	Unknown	11.17	0.64	J

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: TRIP BLANK

Lab Sample ID: 200-22155-15TB

Date Sampled: 05/01/2014 0000

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla25.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 2054			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 2054				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.50	U	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.50	U	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	3.3	J	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	0.50	U	0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	0.50	U	0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.50	U	0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: TRIP BLANK

Lab Sample ID: 200-22155-15TB

Date Sampled: 05/01/2014 0000

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla25.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 2054			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 2054				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	105		65 - 131
Chloroethane-d5	110		71 - 131
1,1-Dichloroethene-d2	81		55 - 104
2-Butanone-d5	98		49 - 155
Chloroform-d	100		78 - 121
1,2-Dichloroethane-d4	111		78 - 129
Benzene-d6	103		77 - 124
1,2-Dichloropropane-d6	89		79 - 124
Toluene-d8	102		77 - 121
trans-1,3-Dichloropropene-d4	94		73 - 121
2-Hexanone-d5	99		28 - 135
1,1,2,2-Tetrachloroethane-d2	95		73 - 125
1,2-Dichlorobenzene-d4	96		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: TRIP BLANK

Lab Sample ID: 200-22155-15TB

Date Sampled: 05/01/2014 0000

Client Matrix: Water

Date Received: 05/02/2014 1030

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla25.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 2054			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 2054				

Tentatively Identified Compounds **Number TIC's Found: 3**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	3.0	B J
541-05-9	Cyclotrisiloxane, hexamethyl-	8.35	0.58	J N
556-67-2	Cyclotetrasiloxane, octamethyl-	11.17	0.71	J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
Total Alkanes			

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-12S_050114

Lab Sample ID: 200-22183-1

Date Sampled: 05/01/2014 1607

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla26.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 2118			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 2118				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.073	J B	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.31	J	0.099	0.50
1,1-Dichloroethene	23	E	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.22	J	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	5.4		0.075	0.50
cis-1,2-Dichloroethene	24	E	0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	9.3		0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.39	J	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	21	E	0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	0.62		0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	6.1		0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-12S_050114

Lab Sample ID: 200-22183-1

Date Sampled: 05/01/2014 1607

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla26.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 2118			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 2118				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	104		65 - 131
Chloroethane-d5	105		71 - 131
1,1-Dichloroethene-d2	200	X	55 - 104
2-Butanone-d5	96		49 - 155
Chloroform-d	99		78 - 121
1,2-Dichloroethane-d4	110		78 - 129
Benzene-d6	101		77 - 124
1,2-Dichloropropane-d6	86		79 - 124
Toluene-d8	99		77 - 121
trans-1,3-Dichloropropene-d4	95		73 - 121
2-Hexanone-d5	98		28 - 135
1,1,2,2-Tetrachloroethane-d2	94		73 - 125
1,2-Dichlorobenzene-d4	94		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-12S_050114

Lab Sample ID: 200-22183-1

Date Sampled: 05/01/2014 1607

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dla26.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 2118			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 2118				

Tentatively Identified Compounds

Cas Number	Analyte	Number TIC's Found:	3	
	Unknown	RT	7.43	2.9
541-05-9	Cyclotrisiloxane, hexamethyl-		8.35	0.63
556-67-2	Cyclotetrasiloxane, octamethyl-		11.17	0.84

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-12S_050114

Lab Sample ID: 200-22183-1

Date Sampled: 05/01/2014 1607

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dld17.d
Dilution:	1.7			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 1948	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 1948				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.85	U	0.13	0.85
Chloromethane	0.85	U	0.11	0.85
Vinyl chloride	0.85	U	0.11	0.85
Bromomethane	0.85	U	0.12	0.85
Chloroethane	0.85	U	0.16	0.85
Trichlorofluoromethane	0.20	J D	0.17	0.85
1,1-Dichloroethene	16	D	0.063	0.85
1,1,2-Trichloro-1,2,2-trifluoroethane	0.85	U	0.065	0.85
Acetone	8.5	U	1.6	8.5
Carbon disulfide	0.85	U	0.085	0.85
Methyl acetate	0.85	U	0.24	0.85
Methylene chloride	0.85	U	0.12	0.85
trans-1,2-Dichloroethene	0.20	J D	0.080	0.85
Methyl tert-butyl ether	0.85	U	0.11	0.85
1,1-Dichloroethane	5.0	D	0.13	0.85
cis-1,2-Dichloroethene	21	D	0.090	0.85
2-Butanone	8.5	U	1.5	8.5
Bromochloromethane	0.85	U	0.12	0.85
Chloroform	0.27	J D	0.14	0.85
1,1,1-Trichloroethane	7.7	D	0.13	0.85
Cyclohexane	0.85	U	0.11	0.85
Carbon tetrachloride	0.30	J D	0.11	0.85
Benzene	0.85	U	0.11	0.85
1,2-Dichloroethane	0.85	U	0.15	0.85
Trichloroethene	15	D	0.14	0.85
Methylcyclohexane	0.85	U	0.13	0.85
1,2-Dichloropropane	0.85	U	0.12	0.85
Bromodichloromethane	0.85	U	0.10	0.85
cis-1,3-Dichloropropene	0.85	U	0.10	0.85
4-Methyl-2-pentanone	8.5	U	1.4	8.5
Toluene	0.52	J D	0.12	0.85
trans-1,3-Dichloropropene	0.85	U	0.37	0.85
1,1,2-Trichloroethane	0.85	U	0.15	0.85
Tetrachloroethene	3.3	D	0.13	0.85
2-Hexanone	8.5	U	1.6	8.5
Dibromochloromethane	0.85	U	0.11	0.85
1,2-Dibromoethane	0.85	U	0.099	0.85
Chlorobenzene	0.85	U	0.11	0.85
Ethylbenzene	0.85	U	0.10	0.85
o-Xylene	0.85	U	0.11	0.85
m,p-Xylene	0.85	U	0.12	0.85
Styrene	0.85	U	0.10	0.85
Bromoform	0.85	U	0.14	0.85
Isopropylbenzene	0.85	U	0.099	0.85
1,1,2,2-Tetrachloroethane	0.85	U	0.15	0.85
1,3-Dichlorobenzene	0.85	U	0.11	0.85

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132Client Sample ID: **MW-12S_050114**

Lab Sample ID: 200-22183-1

Date Sampled: 05/01/2014 1607

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlld17.d
Dilution:	1.7			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 1948	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 1948				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.85	U	0.10	0.85
1,2-Dichlorobenzene	0.85	U	0.12	0.85
1,2-Dibromo-3-chloropropane	0.85	U	0.27	0.85
1,2,4-Trichlorobenzene	0.85	U	0.11	0.85
1,2,3-Trichlorobenzene	0.85	U	0.15	0.85

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	114	D	65 - 131
Chloroethane-d5	122	D	71 - 131
1,1-Dichloroethene-d2	145	X D	55 - 104
2-Butanone-d5	112	D	49 - 155
Chloroform-d	110	D	78 - 121
1,2-Dichloroethane-d4	129	D	78 - 129
Benzene-d6	105	D	77 - 124
1,2-Dichloropropane-d6	92	D	79 - 124
Toluene-d8	103	D	77 - 121
trans-1,3-Dichloropropene-d4	97	D	73 - 121
2-Hexanone-d5	105	D	28 - 135
1,1,2,2-Tetrachloroethane-d2	96	D	73 - 125
1,2-Dichlorobenzene-d4	96	D	80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-12S_050114

Lab Sample ID: 200-22183-1

Date Sampled: 05/01/2014 1607

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	d1ld17.d
Dilution:	1.7			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 1948	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 1948				

Tentatively Identified Compounds **Number TIC's Found: 4**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	4.64	1.8	J D
	Unknown	7.43	5.2	J B D
	Unknown	8.35	0.93	J D
	Unknown	11.17	1.4	J D

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: EB-4_050114

Lab Sample ID: 200-22183-2

Date Sampled: 05/01/2014 1635

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla27.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 2143			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 2143				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.50	U	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.50	U	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.27	J	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	0.50	U	0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	0.50	U	0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.50	U	0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: EB-4_050114

Lab Sample ID: 200-22183-2

Date Sampled: 05/01/2014 1635

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla27.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 2143			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 2143				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	107		65 - 131
Chloroethane-d5	106		71 - 131
1,1-Dichloroethene-d2	82		55 - 104
2-Butanone-d5	99		49 - 155
Chloroform-d	100		78 - 121
1,2-Dichloroethane-d4	111		78 - 129
Benzene-d6	100		77 - 124
1,2-Dichloropropane-d6	87		79 - 124
Toluene-d8	100		77 - 121
trans-1,3-Dichloropropene-d4	95		73 - 121
2-Hexanone-d5	99		28 - 135
1,1,2,2-Tetrachloroethane-d2	94		73 - 125
1,2-Dichlorobenzene-d4	96		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: EB-4_050114

Lab Sample ID: 200-22183-2

Date Sampled: 05/01/2014 1635

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-71915	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlla27.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/08/2014 2143			Final Weight/Volume:	25 mL
Prep Date:	05/08/2014 2143				

Tentatively Identified Compounds Number TIC's Found: 3

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	4.64	0.63	J
	Unknown	7.43	3.0	J B
556-67-2	Cyclotetrasiloxane, octamethyl-	11.17	0.64	J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-24S_050114

Lab Sample ID: 200-22183-3

Date Sampled: 05/01/2014 1623

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	d1le06.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1207			Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1207				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.24	J B	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	2.4		0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.22	J	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	24	E	0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	2.7		0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	34	E	0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	0.49	J	0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	5.3		0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-24S_050114

Lab Sample ID: 200-22183-3

Date Sampled: 05/01/2014 1623

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlle06.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1207			Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1207				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	116		65 - 131
Chloroethane-d5	122		71 - 131
1,1-Dichloroethene-d2	105	X	55 - 104
2-Butanone-d5	111		49 - 155
Chloroform-d	110		78 - 121
1,2-Dichloroethane-d4	134	X	78 - 129
Benzene-d6	104		77 - 124
1,2-Dichloropropane-d6	90		79 - 124
Toluene-d8	101		77 - 121
trans-1,3-Dichloropropene-d4	101		73 - 121
2-Hexanone-d5	106		28 - 135
1,1,2,2-Tetrachloroethane-d2	97		73 - 125
1,2-Dichlorobenzene-d4	95		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-24S_050114

Lab Sample ID: 200-22183-3

Date Sampled: 05/01/2014 1623

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	d1le06.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1207			Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1207				

Tentatively Identified Compounds **Number TIC's Found: 3**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	3.1	B J
541-05-9	Cyclotrisiloxane, hexamethyl-	8.35	0.53	J N
	Unknown	11.17	0.81	J

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-24S_050114

Lab Sample ID: 200-22183-3

Date Sampled: 05/01/2014 1623

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlle16.d
Dilution:	2.8			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1613	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1613				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	1.4	U	0.21	1.4
Chloromethane	1.4	U	0.17	1.4
Vinyl chloride	1.4	U	0.19	1.4
Bromomethane	1.4	U	0.19	1.4
Chloroethane	1.4	U	0.26	1.4
Trichlorofluoromethane	1.4	U	0.28	1.4
1,1-Dichloroethene	1.4	U	0.10	1.4
1,1,2-Trichloro-1,2,2-trifluoroethane	1.4	U	0.11	1.4
Acetone	14	U	2.6	14
Carbon disulfide	1.4	U	0.14	1.4
Methyl acetate	1.4	U	0.39	1.4
Methylene chloride	0.45	JD	0.20	1.4
trans-1,2-Dichloroethene	1.4	U	0.13	1.4
Methyl tert-butyl ether	1.4	U	0.17	1.4
1,1-Dichloroethane	1.4	U	0.21	1.4
cis-1,2-Dichloroethene	9.9	D	0.15	1.4
2-Butanone	14	U	2.5	14
Bromochloromethane	1.4	U	0.20	1.4
Chloroform	1.4	U	0.23	1.4
1,1,1-Trichloroethane	0.83	JD	0.22	1.4
Cyclohexane	1.4	U	0.18	1.4
Carbon tetrachloride	1.4	U	0.18	1.4
Benzene	1.4	U	0.18	1.4
1,2-Dichloroethane	1.4	U	0.25	1.4
Trichloroethene	11	D	0.22	1.4
Methylcyclohexane	1.4	U	0.22	1.4
1,2-Dichloropropane	1.4	U	0.20	1.4
Bromodichloromethane	1.4	U	0.17	1.4
cis-1,3-Dichloropropene	1.4	U	0.17	1.4
4-Methyl-2-pentanone	14	U	2.3	14
Toluene	0.25	JD	0.19	1.4
trans-1,3-Dichloropropene	1.4	U	0.62	1.4
1,1,2-Trichloroethane	1.4	U	0.24	1.4
Tetrachloroethene	1.5	D	0.22	1.4
2-Hexanone	14	U	2.7	14
Dibromochloromethane	1.4	U	0.19	1.4
1,2-Dibromoethane	1.4	U	0.16	1.4
Chlorobenzene	1.4	U	0.18	1.4
Ethylbenzene	1.4	U	0.17	1.4
o-Xylene	1.4	U	0.18	1.4
m,p-Xylene	1.4	U	0.19	1.4
Styrene	1.4	U	0.17	1.4
Bromoform	1.4	U	0.23	1.4
Isopropylbenzene	1.4	U	0.16	1.4
1,1,2,2-Tetrachloroethane	1.4	U	0.25	1.4
1,3-Dichlorobenzene	1.4	U	0.18	1.4

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-24S_050114

Lab Sample ID: 200-22183-3

Date Sampled: 05/01/2014 1623

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlle16.d
Dilution:	2.8			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1613	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1613				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	1.4	U	0.17	1.4
1,2-Dichlorobenzene	1.4	U	0.20	1.4
1,2-Dibromo-3-chloropropane	1.4	U	0.45	1.4
1,2,4-Trichlorobenzene	1.4	U	0.18	1.4
1,2,3-Trichlorobenzene	1.4	U	0.25	1.4

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	118	D	65 - 131
Chloroethane-d5	123	D	71 - 131
1,1-Dichloroethene-d2	93	D	55 - 104
2-Butanone-d5	115	D	49 - 155
Chloroform-d	113	D	78 - 121
1,2-Dichloroethane-d4	135	D X	78 - 129
Benzene-d6	102	D	77 - 124
1,2-Dichloropropane-d6	89	D	79 - 124
Toluene-d8	102	D	77 - 121
trans-1,3-Dichloropropene-d4	99	D	73 - 121
2-Hexanone-d5	105	D	28 - 135
1,1,2,2-Tetrachloroethane-d2	96	D	73 - 125
1,2-Dichlorobenzene-d4	95	D	80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-24S_050114

Lab Sample ID: 200-22183-3

Date Sampled: 05/01/2014 1623

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlle16.d
Dilution:	2.8			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1613	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1613				

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	4.64	5.6	D J
	Unknown	7.43	8.6	B D J
	Unknown	8.35	1.8	D J
556-67-2	Cyclotetrasiloxane, octamethyl-	11.17	2.6	D J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-11S_050214

Lab Sample ID: 200-22183-5

Date Sampled: 05/02/2014 0836

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	d1le12.d
Dilution:	8.4			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1435			Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1435				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	4.2	U	0.62	4.2
Chloromethane	4.2	U	0.52	4.2
Vinyl chloride	4.2	U	0.56	4.2
Bromomethane	4.2	U	0.58	4.2
Chloroethane	11		0.78	4.2
Trichlorofluoromethane	1.2	J	0.83	4.2
1,1-Dichloroethene	190	E	0.31	4.2
1,1,2-Trichloro-1,2,2-trifluoroethane	4.2	U	0.32	4.2
Acetone	42	U	7.7	42
Carbon disulfide	4.2	U	0.42	4.2
Methyl acetate	4.2	U	1.2	4.2
Methylene chloride	4.2	U	0.59	4.2
trans-1,2-Dichloroethene	1.7	J	0.39	4.2
Methyl tert-butyl ether	4.2	U	0.52	4.2
1,1-Dichloroethane	210	E	0.63	4.2
cis-1,2-Dichloroethene	780	E	0.45	4.2
2-Butanone	42	U	7.5	42
Bromochloromethane	4.2	U	0.61	4.2
Chloroform	4.2	U	0.68	4.2
1,1,1-Trichloroethane	310	E	0.66	4.2
Cyclohexane	4.2	U	0.55	4.2
Carbon tetrachloride	4.2	U	0.55	4.2
Benzene	4.2	U	0.54	4.2
1,2-Dichloroethane	4.2	U	0.75	4.2
Trichloroethene	230	E	0.67	4.2
Methylcyclohexane	4.2	U	0.65	4.2
1,2-Dichloropropane	4.2	U	0.59	4.2
Bromodichloromethane	4.2	U	0.51	4.2
cis-1,3-Dichloropropene	4.2	U	0.50	4.2
4-Methyl-2-pentanone	42	U	6.9	42
Toluene	0.81	J	0.57	4.2
trans-1,3-Dichloropropene	4.2	U	1.8	4.2
1,1,2-Trichloroethane	4.2	U	0.73	4.2
Tetrachloroethene	17		0.66	4.2
2-Hexanone	42	U	8.0	42
Dibromochloromethane	4.2	U	0.56	4.2
1,2-Dibromoethane	4.2	U	0.49	4.2
Chlorobenzene	4.2	U	0.53	4.2
Ethylbenzene	4.2	U	0.50	4.2
o-Xylene	4.2	U	0.55	4.2
m,p-Xylene	4.2	U	0.57	4.2
Styrene	4.2	U	0.51	4.2
Bromoform	4.2	U	0.70	4.2
Isopropylbenzene	4.2	U	0.49	4.2
1,1,2,2-Tetrachloroethane	4.2	U	0.76	4.2
1,3-Dichlorobenzene	4.2	U	0.54	4.2

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-11S_050214

Lab Sample ID: 200-22183-5

Date Sampled: 05/02/2014 0836

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlle12.d
Dilution:	8.4			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1435			Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1435				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	4.2	U	0.50	4.2
1,2-Dichlorobenzene	4.2	U	0.60	4.2
1,2-Dibromo-3-chloropropane	4.2	U	1.3	4.2
1,2,4-Trichlorobenzene	4.2	U	0.55	4.2
1,2,3-Trichlorobenzene	4.2	U	0.76	4.2

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	116		65 - 131
Chloroethane-d5	124		71 - 131
1,1-Dichloroethene-d2	229	X	55 - 104
2-Butanone-d5	112		49 - 155
Chloroform-d	112		78 - 121
1,2-Dichloroethane-d4	132	X	78 - 129
Benzene-d6	104		77 - 124
1,2-Dichloropropane-d6	89		79 - 124
Toluene-d8	102		77 - 121
trans-1,3-Dichloropropene-d4	100		73 - 121
2-Hexanone-d5	103		28 - 135
1,1,2,2-Tetrachloroethane-d2	96		73 - 125
1,2-Dichlorobenzene-d4	94		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-11S_050214

Lab Sample ID: 200-22183-5

Date Sampled: 05/02/2014 0836

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	d1le12.d
Dilution:	8.4			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1435			Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1435				

Tentatively Identified Compounds **Number TIC's Found:** **4**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	1.39	26	J
	Unknown	7.43	26	B J
	Unknown	8.35	5.4	J
	Unknown	11.17	7.8	J

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-11S_050214

Lab Sample ID: 200-22183-5

Date Sampled: 05/02/2014 0836

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dld13.d
Dilution:	42			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 1809	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 1809				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	21	U	3.1	21
Chloromethane	21	U	2.6	21
Vinyl chloride	21	U	2.8	21
Bromomethane	21	U	2.9	21
Chloroethane	10	J D	3.9	21
Trichlorofluoromethane	21	U	4.2	21
1,1-Dichloroethene	180	D	1.6	21
1,1,2-Trichloro-1,2,2-trifluoroethane	21	U	1.6	21
Acetone	210	U	39	210
Carbon disulfide	21	U	2.1	21
Methyl acetate	21	U	5.9	21
Methylene chloride	21	U	2.9	21
trans-1,2-Dichloroethene	21	U	2.0	21
Methyl tert-butyl ether	21	U	2.6	21
1,1-Dichloroethane	190	D	3.2	21
cis-1,2-Dichloroethene	690	D	2.2	21
2-Butanone	210	U	37	210
Bromochloromethane	21	U	3.1	21
Chloroform	21	U	3.4	21
1,1,1-Trichloroethane	270	D	3.3	21
Cyclohexane	21	U	2.8	21
Carbon tetrachloride	21	U	2.8	21
Benzene	21	U	2.7	21
1,2-Dichloroethane	21	U	3.7	21
Trichloroethene	200	D	3.4	21
Methylcyclohexane	21	U	3.2	21
1,2-Dichloropropane	21	U	2.9	21
Bromodichloromethane	21	U	2.6	21
cis-1,3-Dichloropropene	21	U	2.5	21
4-Methyl-2-pentanone	210	U	34	210
Toluene	21	U	2.9	21
trans-1,3-Dichloropropene	21	U	9.2	21
1,1,2-Trichloroethane	21	U	3.7	21
Tetrachloroethene	16	J D	3.3	21
2-Hexanone	210	U	40	210
Dibromochloromethane	21	U	2.8	21
1,2-Dibromoethane	21	U	2.4	21
Chlorobenzene	21	U	2.6	21
Ethylbenzene	21	U	2.5	21
o-Xylene	21	U	2.7	21
m,p-Xylene	21	U	2.9	21
Styrene	21	U	2.6	21
Bromoform	21	U	3.5	21
Isopropylbenzene	21	U	2.4	21
1,1,2,2-Tetrachloroethane	21	U	3.8	21
1,3-Dichlorobenzene	21	U	2.7	21

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-11S_050214

Lab Sample ID: 200-22183-5

Date Sampled: 05/02/2014 0836

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	d1ld13.d
Dilution:	42			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 1809	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 1809				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	21	U	2.5	21
1,2-Dichlorobenzene	21	U	3.0	21
1,2-Dibromo-3-chloropropane	21	U	6.7	21
1,2,4-Trichlorobenzene	21	U	2.8	21
1,2,3-Trichlorobenzene	21	U	3.8	21

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	117	D	65 - 131
Chloroethane-d5	124	D	71 - 131
1,1-Dichloroethene-d2	117	D X	55 - 104
2-Butanone-d5	114	D	49 - 155
Chloroform-d	113	D	78 - 121
1,2-Dichloroethane-d4	131	D X	78 - 129
Benzene-d6	108	D	77 - 124
1,2-Dichloropropane-d6	93	D	79 - 124
Toluene-d8	105	D	77 - 121
trans-1,3-Dichloropropene-d4	103	D	73 - 121
2-Hexanone-d5	107	D	28 - 135
1,1,2,2-Tetrachloroethane-d2	100	D	73 - 125
1,2-Dichlorobenzene-d4	99	D	80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-11S_050214

Lab Sample ID: 200-22183-5

Date Sampled: 05/02/2014 0836

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlld13.d
Dilution:	42			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 1809	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 1809				

Tentatively Identified Compounds

Cas Number	Analyte	Number TIC's Found:	2	
	Unknown		7.43	130
	Unknown		11.17	28

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-12D_050214

Lab Sample ID: 200-22183-6

Date Sampled: 05/02/2014 0947

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlle14.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1524			Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1524				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.50	U	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.92		0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	1.4		0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	69	E	0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	31	E	0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	1.4		0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	5.0		0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-12D_050214

Lab Sample ID: 200-22183-6

Date Sampled: 05/02/2014 0947

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	d1le14.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1524			Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1524				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	115		65 - 131
Chloroethane-d5	126		71 - 131
1,1-Dichloroethene-d2	97		55 - 104
2-Butanone-d5	115		49 - 155
Chloroform-d	114		78 - 121
1,2-Dichloroethane-d4	139	X	78 - 129
Benzene-d6	105		77 - 124
1,2-Dichloropropane-d6	90		79 - 124
Toluene-d8	103		77 - 121
trans-1,3-Dichloropropene-d4	95		73 - 121
2-Hexanone-d5	105		28 - 135
1,1,2,2-Tetrachloroethane-d2	99		73 - 125
1,2-Dichlorobenzene-d4	97		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-12D_050214

Lab Sample ID: 200-22183-6

Date Sampled: 05/02/2014 0947

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dll14.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1524			Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1524				

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	4.64	0.64	J
	Unknown	7.43	3.0	B J
	Unknown	8.35	0.66	J
556-67-2	Cyclotetrasiloxane, octamethyl-	11.17	1.0	J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-12D_050214

Lab Sample ID: 200-22183-6

Date Sampled: 05/02/2014 0947

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlld16.d
Dilution:	3.2			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 1923	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 1923				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	1.6	U	0.24	1.6
Chloromethane	1.6	U	0.20	1.6
Vinyl chloride	1.6	U	0.21	1.6
Bromomethane	1.6	U	0.22	1.6
Chloroethane	1.6	U	0.30	1.6
Trichlorodifluoromethane	1.6	U	0.32	1.6
1,1-Dichloroethene	1.6	U	0.12	1.6
1,1,2-Trichloro-1,2,2-trifluoroethane	1.6	U	0.12	1.6
Acetone	16	U	2.9	16
Carbon disulfide	1.6	U	0.16	1.6
Methyl acetate	1.6	U	0.45	1.6
Methylene chloride	1.6	U	0.22	1.6
trans-1,2-Dichloroethene	1.3	JD	0.15	1.6
Methyl tert-butyl ether	1.6	U	0.20	1.6
1,1-Dichloroethane	1.6	U	0.24	1.6
cis-1,2-Dichloroethene	60	D	0.17	1.6
2-Butanone	16	U	2.8	16
Bromochloromethane	1.6	U	0.23	1.6
Chloroform	1.6	U	0.26	1.6
1,1,1-Trichloroethane	1.6	U	0.25	1.6
Cyclohexane	1.6	U	0.21	1.6
Carbon tetrachloride	1.6	U	0.21	1.6
Benzene	1.6	U	0.20	1.6
1,2-Dichloroethane	1.6	U	0.28	1.6
Trichloroethene	28	D	0.26	1.6
Methylcyclohexane	1.6	U	0.25	1.6
1,2-Dichloropropane	1.6	U	0.22	1.6
Bromodichloromethane	1.6	U	0.20	1.6
cis-1,3-Dichloropropene	1.6	U	0.19	1.6
4-Methyl-2-pentanone	16	U	2.6	16
Toluene	1.4	JD	0.22	1.6
trans-1,3-Dichloropropene	1.6	U	0.70	1.6
1,1,2-Trichloroethane	1.6	U	0.28	1.6
Tetrachloroethene	4.9	D	0.25	1.6
2-Hexanone	16	U	3.0	16
Dibromochloromethane	1.6	U	0.21	1.6
1,2-Dibromoethane	1.6	U	0.19	1.6
Chlorobenzene	1.6	U	0.20	1.6
Ethylbenzene	1.6	U	0.19	1.6
o-Xylene	1.6	U	0.21	1.6
m,p-Xylene	1.6	U	0.22	1.6
Styrene	1.6	U	0.20	1.6
Bromoform	1.6	U	0.27	1.6
Isopropylbenzene	1.6	U	0.19	1.6
1,1,2,2-Tetrachloroethane	1.6	U	0.29	1.6
1,3-Dichlorobenzene	1.6	U	0.20	1.6

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-12D_050214

Lab Sample ID: 200-22183-6

Date Sampled: 05/02/2014 0947

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dld16.d
Dilution:	3.2			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 1923	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 1923				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	1.6	U	0.19	1.6
1,2-Dichlorobenzene	1.6	U	0.23	1.6
1,2-Dibromo-3-chloropropane	1.6	U	0.51	1.6
1,2,4-Trichlorobenzene	1.6	U	0.21	1.6
1,2,3-Trichlorobenzene	1.6	U	0.29	1.6

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	121	D	65 - 131
Chloroethane-d5	130	D	71 - 131
1,1-Dichloroethene-d2	95	D	55 - 104
2-Butanone-d5	112	D	49 - 155
Chloroform-d	115	D	78 - 121
1,2-Dichloroethane-d4	132	X D	78 - 129
Benzene-d6	110	D	77 - 124
1,2-Dichloropropane-d6	95	D	79 - 124
Toluene-d8	109	D	77 - 121
trans-1,3-Dichloropropene-d4	99	D	73 - 121
2-Hexanone-d5	109	D	28 - 135
1,1,2,2-Tetrachloroethane-d2	98	D	73 - 125
1,2-Dichlorobenzene-d4	100	D	80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-12D_050214

Lab Sample ID: 200-22183-6

Date Sampled: 05/02/2014 0947

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlld16.d
Dilution:	3.2			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 1923	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 1923				

Tentatively Identified Compounds Number TIC's Found: 5

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	4.64	3.6	J D
	Unknown	7.43	9.8	J B D
541-05-9	Cyclotrisiloxane, hexamethyl-	8.35	5.9	J N D
556-67-2	Cyclotetrasiloxane, octamethyl-	11.17	9.9	J N D
	Unknown	13.31	2.8	J D

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-20D_050214

Lab Sample ID: 200-22183-7

Date Sampled: 05/02/2014 1052

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlle19.d
Dilution:	5.3			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1727			Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1727				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	2.7	U	0.39	2.7
Chloromethane	2.7	U	0.33	2.7
Vinyl chloride	33		0.36	2.7
Bromomethane	2.7	U	0.37	2.7
Chloroethane	2.7	U	0.49	2.7
Trichlorofluoromethane	2.7	U	0.52	2.7
1,1-Dichloroethene	28		0.20	2.7
1,1,2-Trichloro-1,2,2-trifluoroethane	2.7	U	0.20	2.7
Acetone	27	U	4.9	27
Carbon disulfide	2.7	U	0.27	2.7
Methyl acetate	2.7	U	0.74	2.7
Methylene chloride	2.7	U	0.37	2.7
trans-1,2-Dichloroethene	2.2	J	0.25	2.7
Methyl tert-butyl ether	2.7	U	0.33	2.7
1,1-Dichloroethane	11		0.40	2.7
cis-1,2-Dichloroethene	430	E	0.28	2.7
2-Butanone	27	U	4.7	27
Bromochloromethane	2.7	U	0.39	2.7
Chloroform	1.2	J	0.43	2.7
1,1,1-Trichloroethane	5.2		0.41	2.7
Cyclohexane	2.7	U	0.35	2.7
Carbon tetrachloride	2.7	U	0.35	2.7
Benzene	2.7	U	0.34	2.7
1,2-Dichloroethane	2.7	U	0.47	2.7
Trichloroethene	170	E	0.42	2.7
Methylcyclohexane	2.7	U	0.41	2.7
1,2-Dichloropropane	2.7	U	0.37	2.7
Bromodichloromethane	2.7	U	0.32	2.7
cis-1,3-Dichloropropene	2.7	U	0.32	2.7
4-Methyl-2-pentanone	27	U	4.3	27
Toluene	1.4	J	0.36	2.7
trans-1,3-Dichloropropene	2.7	U	1.2	2.7
1,1,2-Trichloroethane	2.7	U	0.46	2.7
Tetrachloroethene	37		0.41	2.7
2-Hexanone	27	U	5.0	27
Dibromochloromethane	2.7	U	0.36	2.7
1,2-Dibromoethane	2.7	U	0.31	2.7
Chlorobenzene	2.7	U	0.33	2.7
Ethylbenzene	2.7	U	0.31	2.7
o-Xylene	2.7	U	0.34	2.7
m,p-Xylene	2.7	U	0.36	2.7
Styrene	2.7	U	0.32	2.7
Bromoform	2.7	U	0.44	2.7
Isopropylbenzene	2.7	U	0.31	2.7
1,1,2,2-Tetrachloroethane	2.7	U	0.48	2.7
1,3-Dichlorobenzene	2.7	U	0.34	2.7

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-20D_050214

Lab Sample ID: 200-22183-7

Date Sampled: 05/02/2014 1052

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlle19.d
Dilution:	5.3			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1727			Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1727				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	2.7	U	0.31	2.7
1,2-Dichlorobenzene	2.7	U	0.38	2.7
1,2-Dibromo-3-chloropropane	2.7	U	0.85	2.7
1,2,4-Trichlorobenzene	2.7	U	0.35	2.7
1,2,3-Trichlorobenzene	2.7	U	0.48	2.7

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	113		65 - 131
Chloroethane-d5	118		71 - 131
1,1-Dichloroethene-d2	121	X	55 - 104
2-Butanone-d5	104		49 - 155
Chloroform-d	107		78 - 121
1,2-Dichloroethane-d4	127		78 - 129
Benzene-d6	97		77 - 124
1,2-Dichloropropane-d6	86		79 - 124
Toluene-d8	97		77 - 121
trans-1,3-Dichloropropene-d4	92		73 - 121
2-Hexanone-d5	97		28 - 135
1,1,2,2-Tetrachloroethane-d2	91		73 - 125
1,2-Dichlorobenzene-d4	91		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-20D_050214

Lab Sample ID: 200-22183-7

Date Sampled: 05/02/2014 1052

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	d1le19.d
Dilution:	5.3			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1727			Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1727				

Tentatively Identified Compounds Number TIC's Found: 4

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	4.64	4.1	J
	Unknown	7.43	15	B J
	Unknown	8.35	3.8	J
	Unknown	11.17	5.8	J

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-20D_050214

Lab Sample ID: 200-22183-7

Date Sampled: 05/02/2014 1052

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlld12.d
Dilution:	26			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 1744	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 1744				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	13	U	1.9	13
Chloromethane	13	U	1.6	13
Vinyl chloride	27	D	1.7	13
Bromomethane	13	U	1.8	13
Chloroethane	13	U	2.4	13
Trichlorofluoromethane	13	U	2.6	13
1,1-Dichloroethene	26	D	0.96	13
1,1,2-Trichloro-1,2,2-trifluoroethane	13	U	0.99	13
Acetone	130	U	24	130
Carbon disulfide	13	U	1.3	13
Methyl acetate	13	U	3.6	13
Methylene chloride	13	U	1.8	13
trans-1,2-Dichloroethene	2.2	JD	1.2	13
Methyl tert-butyl ether	13	U	1.6	13
1,1-Dichloroethane	8.9	JD	2.0	13
cis-1,2-Dichloroethene	340	D	1.4	13
2-Butanone	130	U	23	130
Bromochloromethane	13	U	1.9	13
Chloroform	13	U	2.1	13
1,1,1-Trichloroethane	4.2	JD	2.0	13
Cyclohexane	13	U	1.7	13
Carbon tetrachloride	13	U	1.7	13
Benzene	13	U	1.7	13
1,2-Dichloroethane	13	U	2.3	13
Trichloroethene	140	D	2.1	13
Methylcyclohexane	13	U	2.0	13
1,2-Dichloropropane	13	U	1.8	13
Bromodichloromethane	13	U	1.6	13
cis-1,3-Dichloropropene	13	U	1.6	13
4-Methyl-2-pentanone	130	U	21	130
Toluene	13	U	1.8	13
trans-1,3-Dichloropropene	13	U	5.7	13
1,1,2-Trichloroethane	13	U	2.3	13
Tetrachloroethene	31	D	2.0	13
2-Hexanone	130	U	25	130
Dibromochloromethane	13	U	1.7	13
1,2-Dibromoethane	13	U	1.5	13
Chlorobenzene	13	U	1.6	13
Ethylbenzene	13	U	1.5	13
o-Xylene	13	U	1.7	13
m,p-Xylene	13	U	1.8	13
Styrene	13	U	1.6	13
Bromoform	13	U	2.2	13
Isopropylbenzene	13	U	1.5	13
1,1,2,2-Tetrachloroethane	13	U	2.4	13
1,3-Dichlorobenzene	13	U	1.7	13

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-20D_050214

Lab Sample ID: 200-22183-7

Date Sampled: 05/02/2014 1052

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dld12.d
Dilution:	26			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 1744	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 1744				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	13	U	1.5	13
1,2-Dichlorobenzene	13	U	1.9	13
1,2-Dibromo-3-chloropropane	13	U	4.2	13
1,2,4-Trichlorobenzene	13	U	1.7	13
1,2,3-Trichlorobenzene	13	U	2.4	13

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	117	D	65 - 131
Chloroethane-d5	124	D	71 - 131
1,1-Dichloroethene-d2	95	D	55 - 104
2-Butanone-d5	109	D	49 - 155
Chloroform-d	109	D	78 - 121
1,2-Dichloroethane-d4	127	D	78 - 129
Benzene-d6	106	D	77 - 124
1,2-Dichloropropane-d6	91	D	79 - 124
Toluene-d8	104	D	77 - 121
trans-1,3-Dichloropropene-d4	98	D	73 - 121
2-Hexanone-d5	106	D	28 - 135
1,1,2,2-Tetrachloroethane-d2	99	D	73 - 125
1,2-Dichlorobenzene-d4	98	D	80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-20D_050214

Lab Sample ID: 200-22183-7

Date Sampled: 05/02/2014 1052

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlld12.d
Dilution:	26	Run Type:	DL	Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 1744			Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 1744				

Tentatively Identified Compounds **Number TIC's Found:** **1**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	81	B D J

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-15S_050214

Lab Sample ID: 200-22183-8

Date Sampled: 05/02/2014 0803

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dld14.d
Dilution:	7.6			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 1834			Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 1834				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	3.8	U	0.56	3.8
Chloromethane	3.8	U	0.47	3.8
Vinyl chloride	3.8	U	0.51	3.8
Bromomethane	3.8	U	0.52	3.8
Chloroethane	3.8	U	0.71	3.8
Trichlorofluoromethane	3.3	J	0.75	3.8
1,1-Dichloroethene	370	E	0.28	3.8
1,1,2-Trichloro-1,2,2-trifluoroethane	3.8	U	0.29	3.8
Acetone	38	U	7.0	38
Carbon disulfide	3.8	U	0.38	3.8
Methyl acetate	3.8	U	1.1	3.8
Methylene chloride	3.8	U	0.53	3.8
trans-1,2-Dichloroethene	3.8	U	0.36	3.8
Methyl tert-butyl ether	3.8	U	0.47	3.8
1,1-Dichloroethane	3.0	J	0.57	3.8
cis-1,2-Dichloroethene	41		0.40	3.8
2-Butanone	38	U	6.8	38
Bromochloromethane	3.8	U	0.55	3.8
Chloroform	3.8	U	0.62	3.8
1,1,1-Trichloroethane	93		0.59	3.8
Cyclohexane	3.8	U	0.50	3.8
Carbon tetrachloride	3.8	U	0.50	3.8
Benzene	3.8	U	0.49	3.8
1,2-Dichloroethane	3.8	U	0.68	3.8
Trichloroethene	130		0.61	3.8
Methylcyclohexane	3.8	U	0.59	3.8
1,2-Dichloropropane	3.8	U	0.53	3.8
Bromodichloromethane	3.8	U	0.46	3.8
cis-1,3-Dichloropropene	3.8	U	0.46	3.8
4-Methyl-2-pentanone	38	U	6.2	38
Toluene	0.60	J	0.52	3.8
trans-1,3-Dichloropropene	3.8	U	1.7	3.8
1,1,2-Trichloroethane	3.8	U	0.66	3.8
Tetrachloroethene	4.4		0.59	3.8
2-Hexanone	38	U	7.2	38
Dibromochloromethane	3.8	U	0.51	3.8
1,2-Dibromoethane	3.8	U	0.44	3.8
Chlorobenzene	3.8	U	0.48	3.8
Ethylbenzene	3.8	U	0.45	3.8
o-Xylene	3.8	U	0.49	3.8
m,p-Xylene	3.8	U	0.52	3.8
Styrene	3.8	U	0.46	3.8
Bromoform	3.8	U	0.63	3.8
Isopropylbenzene	3.8	U	0.44	3.8
1,1,2,2-Tetrachloroethane	3.8	U	0.69	3.8
1,3-Dichlorobenzene	3.8	U	0.49	3.8

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-15S_050214

Lab Sample ID: 200-22183-8

Date Sampled: 05/02/2014 0803

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlld14.d
Dilution:	7.6			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 1834			Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 1834				

Analyst	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	3.8	U	0.45	3.8
1,2-Dichlorobenzene	3.8	U	0.55	3.8
1,2-Dibromo-3-chloropropane	3.8	U	1.2	3.8
1,2,4-Trichlorobenzene	3.8	U	0.50	3.8
1,2,3-Trichlorobenzene	3.8	U	0.69	3.8

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	117		65 - 131
Chloroethane-d5	123		71 - 131
1,1-Dichloroethene-d2	355	X	55 - 104
2-Butanone-d5	109		49 - 155
Chloroform-d	109		78 - 121
1,2-Dichloroethane-d4	128		78 - 129
Benzene-d6	106		77 - 124
1,2-Dichloropropane-d6	93		79 - 124
Toluene-d8	104		77 - 121
trans-1,3-Dichloropropene-d4	100		73 - 121
2-Hexanone-d5	104		28 - 135
1,1,2,2-Tetrachloroethane-d2	97		73 - 125
1,2-Dichlorobenzene-d4	95		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-15S_050214

Lab Sample ID: 200-22183-8

Date Sampled: 05/02/2014 0803

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlld14.d
Dilution:	7.6			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 1834			Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 1834				

Tentatively Identified Compounds

Number TIC's Found: 2

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	24	J B
	Unknown	11.17	5.3	J

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-15S_050214

Lab Sample ID: 200-22183-8

Date Sampled: 05/02/2014 0803

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlle08.d
Dilution:	26			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1256	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1256				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	13	U	1.9	13
Chloromethane	13	U	1.6	13
Vinyl chloride	13	U	1.7	13
Bromomethane	13	U	1.8	13
Chloroethane	13	U	2.4	13
Trichlorofluoromethane	3.1	J D	2.6	13
1,1-Dichloroethene	380	D	0.96	13
1,1,2-Trichloro-1,2,2-trifluoroethane	13	U	0.99	13
Acetone	130	U	24	130
Carbon disulfide	13	U	1.3	13
Methyl acetate	13	U	3.6	13
Methylene chloride	13	U	1.8	13
trans-1,2-Dichloroethene	13	U	1.2	13
Methyl tert-butyl ether	13	U	1.6	13
1,1-Dichloroethane	13	U	2.0	13
cis-1,2-Dichloroethene	45	D	1.4	13
2-Butanone	130	U	23	130
Bromochloromethane	13	U	1.9	13
Chloroform	13	U	2.1	13
1,1,1-Trichloroethane	97	D	2.0	13
Cyclohexane	13	U	1.7	13
Carbon tetrachloride	13	U	1.7	13
Benzene	13	U	1.7	13
1,2-Dichloroethane	13	U	2.3	13
Trichloroethene	130	D	2.1	13
Methylcyclohexane	13	U	2.0	13
1,2-Dichloropropane	13	U	1.8	13
Bromodichloromethane	13	U	1.6	13
cis-1,3-Dichloropropene	13	U	1.6	13
4-Methyl-2-pentanone	130	U	21	130
Toluene	13	U	1.8	13
trans-1,3-Dichloropropene	13	U	5.7	13
1,1,2-Trichloroethane	13	U	2.3	13
Tetrachloroethene	4.4	J D	2.0	13
2-Hexanone	130	U	25	130
Dibromochloromethane	13	U	1.7	13
1,2-Dibromoethane	13	U	1.5	13
Chlorobenzene	13	U	1.6	13
Ethylbenzene	13	U	1.5	13
o-Xylene	13	U	1.7	13
m,p-Xylene	13	U	1.8	13
Styrene	13	U	1.6	13
Bromoform	13	U	2.2	13
Isopropylbenzene	13	U	1.5	13
1,1,2,2-Tetrachloroethane	13	U	2.4	13
1,3-Dichlorobenzene	13	U	1.7	13

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-15S_050214

Lab Sample ID: 200-22183-8

Date Sampled: 05/02/2014 0803

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	d1le08.d
Dilution:	26			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1256	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1256				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	13	U	1.5	13
1,2-Dichlorobenzene	13	U	1.9	13
1,2-Dibromo-3-chloropropane	13	U	4.2	13
1,2,4-Trichlorobenzene	13	U	1.7	13
1,2,3-Trichlorobenzene	13	U	2.4	13

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	118	D	65 - 131
Chloroethane-d5	122	D	71 - 131
1,1-Dichloroethene-d2	177	D X	55 - 104
2-Butanone-d5	109	D	49 - 155
Chloroform-d	110	D	78 - 121
1,2-Dichloroethane-d4	134	D X	78 - 129
Benzene-d6	102	D	77 - 124
1,2-Dichloropropane-d6	90	D	79 - 124
Toluene-d8	101	D	77 - 121
trans-1,3-Dichloropropene-d4	102	D	73 - 121
2-Hexanone-d5	103	D	28 - 135
1,1,2,2-Tetrachloroethane-d2	97	D	73 - 125
1,2-Dichlorobenzene-d4	92	D	80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-15S_050214

Lab Sample ID: 200-22183-8

Date Sampled: 05/02/2014 0803

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	d1le08.d
Dilution:	26			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1256	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1256				

Tentatively Identified Compounds Number TIC's Found: 3

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	81	B D J
	Unknown	8.35	14	D J
	Unknown	11.17	20	D J

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-7S_050214

Lab Sample ID: 200-22183-9

Date Sampled: 05/02/2014 0858

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	d1le17.d
Dilution:	14			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1638			Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1638				

Analyst	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	7.0	U	1.0	7.0
Chloromethane	7.0	U	0.87	7.0
Vinyl chloride	7.0	U	0.94	7.0
Bromomethane	7.0	U	0.97	7.0
Chloroethane	7.0	U	1.3	7.0
Trichlorofluoromethane	7.0	U	1.4	7.0
1,1-Dichloroethene	48		0.52	7.0
1,1,2-Trichloro-1,2,2-trifluoroethane	7.0	U	0.53	7.0
Acetone	70	U	13	70
Carbon disulfide	7.0	U	0.70	7.0
Methyl acetate	7.0	U	2.0	7.0
Methylene chloride	7.0	U	0.98	7.0
trans-1,2-Dichloroethene	7.0	U	0.66	7.0
Methyl tert-butyl ether	7.0	U	0.87	7.0
1,1-Dichloroethane	7.7		1.1	7.0
cis-1,2-Dichloroethene	190		0.74	7.0
2-Butanone	70	U	12	70
Bromochloromethane	7.0	U	1.0	7.0
Chloroform	7.0	U	1.1	7.0
1,1,1-Trichloroethane	61		1.1	7.0
Cyclohexane	7.0	U	0.92	7.0
Carbon tetrachloride	7.0	U	0.92	7.0
Benzene	7.0	U	0.90	7.0
1,2-Dichloroethane	7.0	U	1.2	7.0
Trichloroethene	1100	E	1.1	7.0
Methylcyclohexane	7.0	U	1.1	7.0
1,2-Dichloropropane	7.0	U	0.98	7.0
Bromodichloromethane	7.0	U	0.85	7.0
cis-1,3-Dichloropropene	7.0	U	0.84	7.0
4-Methyl-2-pentanone	70	U	11	70
Toluene	7.0	U	0.95	7.0
trans-1,3-Dichloropropene	7.0	U	3.1	7.0
1,1,2-Trichloroethane	7.0	U	1.2	7.0
Tetrachloroethene	150		1.1	7.0
2-Hexanone	70	U	13	70
Dibromochloromethane	7.0	U	0.94	7.0
1,2-Dibromoethane	7.0	U	0.81	7.0
Chlorobenzene	7.0	U	0.88	7.0
Ethylbenzene	7.0	U	0.83	7.0
o-Xylene	7.0	U	0.91	7.0
m,p-Xylene	7.0	U	0.95	7.0
Styrene	7.0	U	0.85	7.0
Bromoform	7.0	U	1.2	7.0
Isopropylbenzene	7.0	U	0.81	7.0
1,1,2,2-Tetrachloroethane	7.0	U	1.3	7.0
1,3-Dichlorobenzene	7.0	U	0.90	7.0

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-7S_050214

Lab Sample ID: 200-22183-9

Date Sampled: 05/02/2014 0858

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	d1le17.d
Dilution:	14			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1638			Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1638				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	7.0	U	0.83	7.0
1,2-Dichlorobenzene	7.0	U	1.0	7.0
1,2-Dibromo-3-chloropropane	7.0	U	2.2	7.0
1,2,4-Trichlorobenzene	7.0	U	0.92	7.0
1,2,3-Trichlorobenzene	7.0	U	1.3	7.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	112		65 - 131
Chloroethane-d5	119		71 - 131
1,1-Dichloroethene-d2	109	X	55 - 104
2-Butanone-d5	106		49 - 155
Chloroform-d	107		78 - 121
1,2-Dichloroethane-d4	129		78 - 129
Benzene-d6	99		77 - 124
1,2-Dichloropropane-d6	87		79 - 124
Toluene-d8	98		77 - 121
trans-1,3-Dichloropropene-d4	94		73 - 121
2-Hexanone-d5	97		28 - 135
1,1,2,2-Tetrachloroethane-d2	89		73 - 125
1,2-Dichlorobenzene-d4	90		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-7S_050214

Lab Sample ID: 200-22183-9

Date Sampled: 05/02/2014 0858

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dll17.d
Dilution:	14			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1638			Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1638				

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	4.64	7.9	J
	Unknown	7.43	41	B J
	Unknown	8.35	8.1	J
556-67-2	Cyclotetrasiloxane, octamethyl-	11.17	13	J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-7S_050214

Lab Sample ID: 200-22183-9

Date Sampled: 05/02/2014 0858

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlle09.d
Dilution:	70			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1321	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1321				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	35	U	5.2	35
Chloromethane	35	U	4.3	35
Vinyl chloride	35	U	4.7	35
Bromomethane	35	U	4.8	35
Chloroethane	35	U	6.5	35
Trichlorofluoromethane	35	U	6.9	35
1,1-Dichloroethene	52	D	2.6	35
1,1,2-Trichloro-1,2,2-trifluoroethane	35	U	2.7	35
Acetone	350	U	64	350
Carbon disulfide	35	U	3.5	35
Methyl acetate	35	U	9.8	35
Methylene chloride	35	U	4.9	35
trans-1,2-Dichloroethene	35	U	3.3	35
Methyl tert-butyl ether	35	U	4.3	35
1,1-Dichloroethane	35	U	5.3	35
cis-1,2-Dichloroethene	180	D	3.7	35
2-Butanone	350	U	62	350
Bromochloromethane	35	U	5.1	35
Chloroform	35	U	5.7	35
1,1,1-Trichloroethane	59	D	5.5	35
Cyclohexane	35	U	4.6	35
Carbon tetrachloride	35	U	4.6	35
Benzene	35	U	4.5	35
1,2-Dichloroethane	35	U	6.2	35
Trichloroethene	1000	D	5.6	35
Methylcyclohexane	35	U	5.4	35
1,2-Dichloropropane	35	U	4.9	35
Bromodichloromethane	35	U	4.3	35
cis-1,3-Dichloropropene	35	U	4.2	35
4-Methyl-2-pentanone	350	U	57	350
Toluene	35	U	4.8	35
trans-1,3-Dichloropropene	35	U	15	35
1,1,2-Trichloroethane	35	U	6.1	35
Tetrachloroethene	140	D	5.5	35
2-Hexanone	350	U	67	350
Dibromochloromethane	35	U	4.7	35
1,2-Dibromoethane	35	U	4.1	35
Chlorobenzene	35	U	4.4	35
Ethylbenzene	35	U	4.1	35
o-Xylene	35	U	4.6	35
m,p-Xylene	35	U	4.8	35
Styrene	35	U	4.3	35
Bromoform	35	U	5.8	35
Isopropylbenzene	35	U	4.1	35
1,1,2,2-Tetrachloroethane	35	U	6.4	35
1,3-Dichlorobenzene	35	U	4.5	35

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-7S_050214

Lab Sample ID: 200-22183-9

Date Sampled: 05/02/2014 0858

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dille09.d
Dilution:	70			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1321	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1321				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	35	U	4.1	35
1,2-Dichlorobenzene	35	U	5.0	35
1,2-Dibromo-3-chloropropane	35	U	11	35
1,2,4-Trichlorobenzene	35	U	4.6	35
1,2,3-Trichlorobenzene	35	U	6.4	35

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	119	D	65 - 131
Chloroethane-d5	124	D	71 - 131
1,1-Dichloroethene-d2	97	D	55 - 104
2-Butanone-d5	111	D	49 - 155
Chloroform-d	112	D	78 - 121
1,2-Dichloroethane-d4	133	D X	78 - 129
Benzene-d6	108	D	77 - 124
1,2-Dichloropropane-d6	94	D	79 - 124
Toluene-d8	107	D	77 - 121
trans-1,3-Dichloropropene-d4	101	D	73 - 121
2-Hexanone-d5	107	D	28 - 135
1,1,2,2-Tetrachloroethane-d2	100	D	73 - 125
1,2-Dichlorobenzene-d4	97	D	80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-7S_050214

Lab Sample ID: 200-22183-9

Date Sampled: 05/02/2014 0858

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlle09.d
Dilution:	70			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1321	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1321				

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	4.64	37	D J
	Unknown	7.43	220	B D J
	Unknown	8.35	41	D J
	Unknown	11.17	63	D J

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-5S_050214

Lab Sample ID: 200-22183-10

Date Sampled: 05/02/2014 0953

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	d1le10.d
Dilution:	131			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1346			Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1346				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	66	U	9.7	66
Chloromethane	66	U	8.1	66
Vinyl chloride	66	U	8.8	66
Bromomethane	66	U	9.0	66
Chloroethane	66	U	12	66
Trichlorofluoromethane	66	U	13	66
1,1-Dichloroethene	700		4.8	66
1,1,2-Trichloro-1,2,2-trifluoroethane	66	U	5.0	66
Acetone	660	U	120	660
Carbon disulfide	66	U	6.6	66
Methyl acetate	66	U	18	66
Methylene chloride	66	U	9.2	66
trans-1,2-Dichloroethene	26	J	6.2	66
Methyl tert-butyl ether	66	U	8.1	66
1,1-Dichloroethane	140		9.8	66
cis-1,2-Dichloroethene	9400	E	6.9	66
2-Butanone	660	U	120	660
Bromochloromethane	66	U	9.6	66
Chloroform	66	U	11	66
1,1,1-Trichloroethane	930		10	66
Cyclohexane	66	U	8.6	66
Carbon tetrachloride	66	U	8.6	66
Benzene	66	U	8.4	66
1,2-Dichloroethane	66	U	12	66
Trichloroethene	11000	E	10	66
Methylcyclohexane	66	U	10	66
1,2-Dichloropropane	66	U	9.2	66
Bromodichloromethane	66	U	8.0	66
cis-1,3-Dichloropropene	66	U	7.9	66
4-Methyl-2-pentanone	660	U	110	660
Toluene	66	U	8.9	66
trans-1,3-Dichloropropene	66	U	29	66
1,1,2-Trichloroethane	66	U	11	66
Tetrachloroethene	67		10	66
2-Hexanone	660	U	120	660
Dibromochloromethane	66	U	8.8	66
1,2-Dibromoethane	66	U	7.6	66
Chlorobenzene	66	U	8.3	66
Ethylbenzene	66	U	7.7	66
o-Xylene	66	U	8.5	66
m,p-Xylene	66	U	8.9	66
Styrene	66	U	8.0	66
Bromoform	66	U	11	66
Isopropylbenzene	66	U	7.6	66
1,1,2,2-Tetrachloroethane	66	U	12	66
1,3-Dichlorobenzene	66	U	8.4	66

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-5S_050214

Lab Sample ID: 200-22183-10

Date Sampled: 05/02/2014 0953

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dille10.d
Dilution:	131			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1346			Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1346				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	66	U	7.7	66
1,2-Dichlorobenzene	66	U	9.4	66
1,2-Dibromo-3-chloropropane	66	U	21	66
1,2,4-Trichlorobenzene	66	U	8.6	66
1,2,3-Trichlorobenzene	66	U	12	66

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	121		65 - 131
Chloroethane-d5	126		71 - 131
1,1-Dichloroethene-d2	125	X	55 - 104
2-Butanone-d5	115		49 - 155
Chloroform-d	113		78 - 121
1,2-Dichloroethane-d4	137	X	78 - 129
Benzene-d6	108		77 - 124
1,2-Dichloropropane-d6	95		79 - 124
Toluene-d8	105		77 - 121
trans-1,3-Dichloropropene-d4	103		73 - 121
2-Hexanone-d5	106		28 - 135
1,1,2,2-Tetrachloroethane-d2	100		73 - 125
1,2-Dichlorobenzene-d4	100		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-5S_050214

Lab Sample ID: 200-22183-10

Date Sampled: 05/02/2014 0953

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72092	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlle10.d
Dilution:	131			Initial Weight/Volume:	25 mL
Analysis Date:	05/13/2014 1346			Final Weight/Volume:	25 mL
Prep Date:	05/13/2014 1346				

Tentatively Identified Compounds **Number TIC's Found: 3**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	420	B J
541-05-9	Cyclotrisiloxane, hexamethyl-	8.35	74	J N
556-67-2	Cyclotetrasiloxane, octamethyl-	11.17	120	J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-5S_050214

Lab Sample ID: 200-22183-10

Date Sampled: 05/02/2014 0953

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlld10.d
Dilution:	656			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 1655	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 1655				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	330	U	49	330
Chloromethane	330	U	41	330
Vinyl chloride	330	U	44	330
Bromomethane	150	J B D	45	330
Chloroethane	330	U	61	330
Trichlorofluoromethane	330	U	65	330
1,1-Dichloroethene	680	D	24	330
1,1,2-Trichloro-1,2,2-trifluoroethane	330	U	25	330
Acetone	1500	J D	600	3300
Carbon disulfide	330	U	33	330
Methyl acetate	330	U	92	330
Methylene chloride	330	U	46	330
trans-1,2-Dichloroethene	330	U	31	330
Methyl tert-butyl ether	330	U	41	330
1,1-Dichloroethane	330	U	49	330
cis-1,2-Dichloroethene	7700	D	35	330
2-Butanone	3300	U	580	3300
Bromochloromethane	330	U	48	330
Chloroform	330	U	53	330
1,1,1-Trichloroethane	750	D	51	330
Cyclohexane	330	U	43	330
Carbon tetrachloride	330	U	43	330
Benzene	330	U	42	330
1,2-Dichloroethane	330	U	58	330
Trichloroethene	9200	D	52	330
Methylcyclohexane	330	U	51	330
1,2-Dichloropropane	330	U	46	330
Bromodichloromethane	330	U	40	330
cis-1,3-Dichloropropene	330	U	39	330
4-Methyl-2-pentanone	3300	U	540	3300
Toluene	330	U	45	330
trans-1,3-Dichloropropene	330	U	140	330
1,1,2-Trichloroethane	330	U	57	330
Tetrachloroethene	58	J D	51	330
2-Hexanone	3300	U	620	3300
Dibromochloromethane	330	U	44	330
1,2-Dibromoethane	330	U	38	330
Chlorobenzene	330	U	41	330
Ethylbenzene	330	U	39	330
o-Xylene	330	U	43	330
m,p-Xylene	330	U	45	330
Styrene	330	U	40	330
Bromoform	330	U	54	330
Isopropylbenzene	330	U	38	330
1,1,2,2-Tetrachloroethane	330	U	60	330
1,3-Dichlorobenzene	330	U	42	330

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-5S_050214

Lab Sample ID: 200-22183-10

Date Sampled: 05/02/2014 0953

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	d1ld10.d
Dilution:	656			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 1655	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 1655				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	330	U	39	330
1,2-Dichlorobenzene	330	U	47	330
1,2-Dibromo-3-chloropropane	330	U	100	330
1,2,4-Trichlorobenzene	330	U	43	330
1,2,3-Trichlorobenzene	330	U	60	330

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	113	D	65 - 131
Chloroethane-d5	115	D	71 - 131
1,1-Dichloroethene-d2	93	D	55 - 104
2-Butanone-d5	99	D	49 - 155
Chloroform-d	105	D	78 - 121
1,2-Dichloroethane-d4	120	D	78 - 129
Benzene-d6	104	D	77 - 124
1,2-Dichloropropane-d6	88	D	79 - 124
Toluene-d8	104	D	77 - 121
trans-1,3-Dichloropropene-d4	98	D	73 - 121
2-Hexanone-d5	96	D	28 - 135
1,1,2,2-Tetrachloroethane-d2	93	D	73 - 125
1,2-Dichlorobenzene-d4	97	D	80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-5S_050214

Lab Sample ID: 200-22183-10

Date Sampled: 05/02/2014 0953

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlld10.d
Dilution:	656			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 1655	Run Type:	DL	Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 1655				

Tentatively Identified Compounds **Number TIC's Found: 3**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	4.64	350	J D
	Unknown	7.43	2000	J B D
	Unknown	11.17	450	J D

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: EB-6_050214

Lab Sample ID: 200-22183-11

Date Sampled: 05/02/2014 1120

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dld18.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 2012			Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 2012				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.50	U	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.50	U	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	20		0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.34	J	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	13		0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	0.50	U	0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	0.14	J	0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.50	U	0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.28	J	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: EB-6_050214

Lab Sample ID: 200-22183-11

Date Sampled: 05/02/2014 1120

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dld18.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 2012			Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 2012				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	111		65 - 131
Chloroethane-d5	118		71 - 131
1,1-Dichloroethene-d2	87		55 - 104
2-Butanone-d5	109		49 - 155
Chloroform-d	108		78 - 121
1,2-Dichloroethane-d4	130	X	78 - 129
Benzene-d6	101		77 - 124
1,2-Dichloropropane-d6	89		79 - 124
Toluene-d8	99		77 - 121
trans-1,3-Dichloropropene-d4	96		73 - 121
2-Hexanone-d5	102		28 - 135
1,1,2,2-Tetrachloroethane-d2	95		73 - 125
1,2-Dichlorobenzene-d4	92		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: EB-6_050214

Lab Sample ID: 200-22183-11

Date Sampled: 05/02/2014 1120

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	d1ld18.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 2012			Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 2012				

Tentatively Identified Compounds **Number TIC's Found:** **4**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
541-05-9	Unknown	4.64	0.55	J
	Unknown	7.43	3.0	J B
	Cyclotrisiloxane, hexamethyl-	8.35	0.67	J N
	Unknown	11.17	1.0	J

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: FB-3_050214

Lab Sample ID: 200-22183-12

Date Sampled: 05/02/2014 1058

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlld19.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 2037			Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 2037				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.50	U	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.50	U	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	19		0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.37	J	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	14		0.89	5.0
Bromochloromethane	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	0.50	U	0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	0.12	J	0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.50	U	0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.40	J	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: FB-3_050214

Lab Sample ID: 200-22183-12

Date Sampled: 05/02/2014 1058

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dld19.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 2037			Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 2037				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	114		65 - 131
Chloroethane-d5	122		71 - 131
1,1-Dichloroethene-d2	92		55 - 104
2-Butanone-d5	107		49 - 155
Chloroform-d	109		78 - 121
1,2-Dichloroethane-d4	129		78 - 129
Benzene-d6	106		77 - 124
1,2-Dichloropropane-d6	90		79 - 124
Toluene-d8	105		77 - 121
trans-1,3-Dichloropropene-d4	96		73 - 121
2-Hexanone-d5	102		28 - 135
1,1,2,2-Tetrachloroethane-d2	97		73 - 125
1,2-Dichlorobenzene-d4	97		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: FB-3_050214

Lab Sample ID: 200-22183-12

Date Sampled: 05/02/2014 1058

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlld19.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 2037			Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 2037				

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	3.0	J B
556-67-2	Cyclotetrasiloxane, octamethyl-	11.17	0.79	J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: TB_050214

Lab Sample ID: 200-22183-13

Date Sampled: 05/02/2014 1103

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlld20.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 2101			Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 2101				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dichlorodifluoromethane	0.50	U	0.074	0.50
Chloromethane	0.50	U	0.062	0.50
Vinyl chloride	0.50	U	0.067	0.50
Bromomethane	0.50	U	0.069	0.50
Chloroethane	0.50	U	0.093	0.50
Trichlorofluoromethane	0.50	U	0.099	0.50
1,1-Dichloroethene	0.50	U	0.037	0.50
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.038	0.50
Acetone	5.0	U	0.92	5.0
Carbon disulfide	0.50	U	0.050	0.50
Methyl acetate	0.50	U	0.14	0.50
Methylene chloride	0.50	U	0.070	0.50
trans-1,2-Dichloroethene	0.50	U	0.047	0.50
Methyl tert-butyl ether	0.50	U	0.062	0.50
1,1-Dichloroethane	0.50	U	0.075	0.50
cis-1,2-Dichloroethene	0.50	U	0.053	0.50
2-Butanone	5.0	U	0.89	5.0
Bromoform	0.50	U	0.073	0.50
Chloroform	0.50	U	0.081	0.50
1,1,1-Trichloroethane	0.50	U	0.078	0.50
Cyclohexane	0.50	U	0.066	0.50
Carbon tetrachloride	0.50	U	0.066	0.50
Benzene	0.50	U	0.064	0.50
1,2-Dichloroethane	0.50	U	0.089	0.50
Trichloroethene	0.50	U	0.080	0.50
Methylcyclohexane	0.50	U	0.077	0.50
1,2-Dichloropropane	0.50	U	0.070	0.50
Bromodichloromethane	0.50	U	0.061	0.50
cis-1,3-Dichloropropene	0.50	U	0.060	0.50
4-Methyl-2-pentanone	5.0	U	0.82	5.0
Toluene	0.50	U	0.068	0.50
trans-1,3-Dichloropropene	0.50	U	0.22	0.50
1,1,2-Trichloroethane	0.50	U	0.087	0.50
Tetrachloroethene	0.50	U	0.078	0.50
2-Hexanone	5.0	U	0.95	5.0
Dibromochloromethane	0.50	U	0.067	0.50
1,2-Dibromoethane	0.50	U	0.058	0.50
Chlorobenzene	0.50	U	0.063	0.50
Ethylbenzene	0.50	U	0.059	0.50
o-Xylene	0.50	U	0.065	0.50
m,p-Xylene	0.50	U	0.068	0.50
Styrene	0.50	U	0.061	0.50
Bromoform	0.50	U	0.083	0.50
Isopropylbenzene	0.50	U	0.058	0.50
1,1,2,2-Tetrachloroethane	0.50	U	0.091	0.50
1,3-Dichlorobenzene	0.50	U	0.064	0.50

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: TB_050214

Lab Sample ID: 200-22183-13

Date Sampled: 05/02/2014 1103

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	dlld20.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 2101			Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 2101				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dichlorobenzene	0.50	U	0.059	0.50
1,2-Dichlorobenzene	0.50	U	0.072	0.50
1,2-Dibromo-3-chloropropane	0.50	U	0.16	0.50
1,2,4-Trichlorobenzene	0.50	U	0.066	0.50
1,2,3-Trichlorobenzene	0.50	U	0.091	0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
Vinyl chloride-d3	112		65 - 131
Chloroethane-d5	121		71 - 131
1,1-Dichloroethene-d2	90		55 - 104
2-Butanone-d5	109		49 - 155
Chloroform-d	109		78 - 121
1,2-Dichloroethane-d4	130	X	78 - 129
Benzene-d6	104		77 - 124
1,2-Dichloropropane-d6	90		79 - 124
Toluene-d8	103		77 - 121
trans-1,3-Dichloropropene-d4	99		73 - 121
2-Hexanone-d5	103		28 - 135
1,1,2,2-Tetrachloroethane-d2	98		73 - 125
1,2-Dichlorobenzene-d4	98		80 - 131

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: TB_050214

Lab Sample ID: 200-22183-13

Date Sampled: 05/02/2014 1103

Client Matrix: Water

Date Received: 05/03/2014 0950

SOM01.2/VOA_Tr Trace Water

Analysis Method:	SOM01.2/VOA_Tr	Analysis Batch:	200-72030	Instrument ID:	D.i
Prep Method:	SOM01.2/VOA_PR	Prep Batch:	N/A	Lab File ID:	d1ld20.d
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	05/12/2014 2101			Final Weight/Volume:	25 mL
Prep Date:	05/12/2014 2101				

Tentatively Identified Compounds **Number TIC's Found: 2**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Unknown	7.43	3.0	J B
556-67-2	Cyclotetrasiloxane, octamethyl-	11.17	0.68	J N

Targeted Tentatively Identified Compounds

Cas Number	Analyte	Est. Result (ug/L)	Qualifier
	Total Alkanes		

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: EB-1_042914

Lab Sample ID: 200-22132-1EB

Date Sampled: 04/29/2014 1115

Client Matrix: Water

Date Received: 05/01/2014 1010

522 MOD 1,4 Dioxane (GC/MS SIM)

Analysis Method:	522 MOD	Analysis Batch:	200-72050	Instrument ID:	CHZ.i
Prep Method:	3535A	Prep Batch:	200-72018	Lab File ID:	Z7522_005.D
Dilution:	1.0			Initial Weight/Volume:	265 mL
Analysis Date:	05/13/2014 1750			Final Weight/Volume:	5000 uL
Prep Date:	05/13/2014 0949			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.19	U	0.056	0.19

Surrogate	%Rec	Qualifier	Acceptance Limits
1,4-Dioxane-d8 (Surr)	85		70 - 130

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: FB-1_042914

Lab Sample ID: 200-22132-3FB

Date Sampled: 04/29/2014 1600

Client Matrix: Water

Date Received: 05/01/2014 1010

522 MOD 1,4 Dioxane (GC/MS SIM)

Analysis Method:	522 MOD	Analysis Batch:	200-72050	Instrument ID:	CHZ.i
Prep Method:	3535A	Prep Batch:	200-72018	Lab File ID:	Z7522_006.D
Dilution:	1.0			Initial Weight/Volume:	261 mL
Analysis Date:	05/13/2014 1805			Final Weight/Volume:	5000 uL
Prep Date:	05/13/2014 0949			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.19	U	0.057	0.19

Surrogate	%Rec	Qualifier	Acceptance Limits
1,4-Dioxane-d8 (Sur)	92		70 - 130

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: EB-2_042914

Lab Sample ID: 200-22132-4EB

Date Sampled: 04/29/2014 1620

Client Matrix: Water

Date Received: 05/01/2014 1010

522 MOD 1,4 Dioxane (GC/MS SIM)

Analysis Method:	522 MOD	Analysis Batch:	200-72050	Instrument ID:	CHZ.i
Prep Method:	3535A	Prep Batch:	200-72018	Lab File ID:	Z7522_007.D
Dilution:	1.0			Initial Weight/Volume:	224 mL
Analysis Date:	05/13/2014 1821			Final Weight/Volume:	5000 uL
Prep Date:	05/13/2014 0949			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.22	U	0.066	0.22

Surrogate	%Rec	Qualifier	Acceptance Limits
1,4-Dioxane-d8 (Surr)	95		70 - 130

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: EB-3_050114

Lab Sample ID: 200-22155-1

Date Sampled: 05/01/2014 0800

Client Matrix: Water

Date Received: 05/02/2014 1030

522 MOD 1,4 Dioxane (GC/MS SIM)

Analysis Method:	522 MOD	Analysis Batch:	200-71845	Instrument ID:	CHZ.i
Prep Method:	3535A	Prep Batch:	200-71836	Lab File ID:	Z7454_043.D
Dilution:	1.0			Initial Weight/Volume:	266 mL
Analysis Date:	05/09/2014 0355			Final Weight/Volume:	5000 uL
Prep Date:	05/08/2014 1124			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.19	U	0.055	0.19

Surrogate	%Rec	Qualifier	Acceptance Limits
1,4-Dioxane-d8 (Sur)	82		70 - 130

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: **MW-19D_050114**

Lab Sample ID: 200-22155-2

Date Sampled: 05/01/2014 0935

Client Matrix: Water

Date Received: 05/02/2014 1030

522 MOD 1,4 Dioxane (GC/MS SIM)

Analysis Method:	522 MOD	Analysis Batch:	200-71845	Instrument ID:	CHZ.i
Prep Method:	3535A	Prep Batch:	200-71836	Lab File ID:	Z7454_044.D
Dilution:	1.0			Initial Weight/Volume:	267 mL
Analysis Date:	05/09/2014 0416			Final Weight/Volume:	5000 uL
Prep Date:	05/08/2014 1124			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	1.2		0.055	0.19

Surrogate	%Rec	Qualifier	Acceptance Limits
1,4-Dioxane-d8 (Sur)	101		70 - 130

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-22D_050114

Lab Sample ID: 200-22155-8

Date Sampled: 05/01/2014 1345

Client Matrix: Water

Date Received: 05/02/2014 1030

522 MOD 1,4 Dioxane (GC/MS SIM)

Analysis Method:	522 MOD	Analysis Batch:	200-71845	Instrument ID:	CHZ.i
Prep Method:	3535A	Prep Batch:	200-71836	Lab File ID:	Z7454_045.D
Dilution:	1.0			Initial Weight/Volume:	267 mL
Analysis Date:	05/09/2014 0436			Final Weight/Volume:	5000 uL
Prep Date:	05/08/2014 1124			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
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1,4-Dioxane	5.9		0.055	0.19
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Surrogate	%Rec	Qualifier	Acceptance Limits
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1,4-Dioxane-d8 (Sur)	82		70 - 130
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Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-5D_050114

Lab Sample ID: 200-22155-11

Date Sampled: 05/01/2014 1352

Client Matrix: Water

Date Received: 05/02/2014 1030

522 MOD 1,4 Dioxane (GC/MS SIM)

Analysis Method:	522 MOD	Analysis Batch:	200-71845	Instrument ID:	CHZ.i
Prep Method:	3535A	Prep Batch:	200-71836	Lab File ID:	Z7454_046.D
Dilution:	1.0			Initial Weight/Volume:	263 mL
Analysis Date:	05/09/2014 0457			Final Weight/Volume:	5000 uL
Prep Date:	05/08/2014 1124			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	2.8		0.056	0.19

Surrogate	%Rec	Qualifier	Acceptance Limits
1,4-Dioxane-d8 (Surr)	91		70 - 130

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: DUP_050114

Lab Sample ID: 200-22155-12

Client Matrix: Water

Date Sampled: 05/01/2014 1358
Date Received: 05/02/2014 1030

522 MOD 1,4 Dioxane (GC/MS SIM)

Analysis Method:	522 MOD	Analysis Batch:	200-71845	Instrument ID:	CHZ.i
Prep Method:	3535A	Prep Batch:	200-71836	Lab File ID:	Z7454_049.D
Dilution:	1.0			Initial Weight/Volume:	264 mL
Analysis Date:	05/09/2014 0600			Final Weight/Volume:	5000 uL
Prep Date:	05/08/2014 1124			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	3.0		0.056	0.19

Surrogate	%Rec	Qualifier	Acceptance Limits
1,4-Dioxane-d8 (Sur)	99		70 - 130

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-15D_050114

Lab Sample ID: 200-22155-13

Date Sampled: 05/01/2014 1513

Client Matrix: Water

Date Received: 05/02/2014 1030

522 MOD 1,4 Dioxane (GC/MS SIM)

Analysis Method:	522 MOD	Analysis Batch:	200-71845	Instrument ID:	CHZ.i
Prep Method:	3535A	Prep Batch:	200-71836	Lab File ID:	Z7454_050.D
Dilution:	1.0			Initial Weight/Volume:	268 mL
Analysis Date:	05/09/2014 0621			Final Weight/Volume:	5000 uL
Prep Date:	05/08/2014 1124			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	4.0		0.055	0.19

Surrogate	%Rec	Qualifier	Acceptance Limits
1,4-Dioxane-d8 (Surr)	101		70 - 130

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: FB-2_050114

Lab Sample ID: 200-22155-14

Date Sampled: 05/01/2014 1540

Client Matrix: Water

Date Received: 05/02/2014 1030

522 MOD 1,4 Dioxane (GC/MS SIM)

Analysis Method:	522 MOD	Analysis Batch:	200-71845	Instrument ID:	CHZ.i
Prep Method:	3535A	Prep Batch:	200-71836	Lab File ID:	Z7454_051.D
Dilution:	1.0			Initial Weight/Volume:	270 mL
Analysis Date:	05/09/2014 0723			Final Weight/Volume:	5000 uL
Prep Date:	05/08/2014 1124			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.63		0.055	0.19

Surrogate	%Rec	Qualifier	Acceptance Limits
1,4-Dioxane-d8 (Sur)	93		70 - 130

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-12S_050114

Lab Sample ID: 200-22183-1

Date Sampled: 05/01/2014 1607

Client Matrix: Water

Date Received: 05/03/2014 0950

522 MOD 1,4 Dioxane (GC/MS SIM)

Analysis Method:	522 MOD	Analysis Batch:	200-72050	Instrument ID:	CHZ.i
Prep Method:	3535A	Prep Batch:	200-72018	Lab File ID:	Z7522_008.D
Dilution:	1.0			Initial Weight/Volume:	270 mL
Analysis Date:	05/13/2014 1837			Final Weight/Volume:	5000 uL
Prep Date:	05/13/2014 0949			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	10		0.055	0.19

Surrogate	%Rec	Qualifier	Acceptance Limits
1,4-Dioxane-d8 (Surr)	99		70 - 130

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132Client Sample ID: **EB-4_050114**

Lab Sample ID: 200-22183-2

Date Sampled: 05/01/2014 1635

Client Matrix: Water

Date Received: 05/03/2014 0950

522 MOD 1,4 Dioxane (GC/MS SIM)

Analysis Method:	522 MOD	Analysis Batch:	200-72050	Instrument ID:	CHZ.i
Prep Method:	3535A	Prep Batch:	200-72018	Lab File ID:	Z7522_009.D
Dilution:	1.0			Initial Weight/Volume:	269 mL
Analysis Date:	05/13/2014 1852			Final Weight/Volume:	5000 uL
Prep Date:	05/13/2014 0949			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.61		0.055	0.19

Surrogate	%Rec	Qualifier	Acceptance Limits
1,4-Dioxane-d8 (Sur)	89		70 - 130

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132Client Sample ID: **MW-24S_050114**

Lab Sample ID: 200-22183-3

Date Sampled: 05/01/2014 1623
Date Received: 05/03/2014 0950

Client Matrix: Water

522 MOD 1,4 Dioxane (GC/MS SIM)

Analysis Method:	522 MOD	Analysis Batch:	200-72050	Instrument ID:	CHZ.i
Prep Method:	3535A	Prep Batch:	200-72018	Lab File ID:	Z7522_010.D
Dilution:	1.0			Initial Weight/Volume:	267 mL
Analysis Date:	05/13/2014 1908			Final Weight/Volume:	5000 uL
Prep Date:	05/13/2014 0949			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	1.3		0.055	0.19

Surrogate	%Rec	Qualifier	Acceptance Limits
1,4-Dioxane-d8 (Surr)	95		70 - 130

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: EB-5_050214

Lab Sample ID: 200-22183-4

Date Sampled: 05/02/2014 0730

Client Matrix: Water

Date Received: 05/03/2014 0950

522 MOD 1,4 Dioxane (GC/MS SIM)

Analysis Method:	522 MOD	Analysis Batch:	200-72050	Instrument ID:	CHZ.i
Prep Method:	3535A	Prep Batch:	200-72018	Lab File ID:	Z7522_011.D
Dilution:	1.0			Initial Weight/Volume:	263 uL
Analysis Date:	05/13/2014 1924			Final Weight/Volume:	5000 uL
Prep Date:	05/13/2014 0949			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.58		0.056	0.19

Surrogate	%Rec	Qualifier	Acceptance Limits
1,4-Dioxane-d8 (Sur)	84		70 - 130

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-11S_050214

Lab Sample ID: 200-22183-5

Date Sampled: 05/02/2014 0836

Client Matrix: Water

Date Received: 05/03/2014 0950

522 MOD 1,4 Dioxane (GC/MS SIM)

Analysis Method:	522 MOD	Analysis Batch:	200-72100	Instrument ID:	CHZ.i
Prep Method:	3535A	Prep Batch:	200-72018	Lab File ID:	Z7545_003.D
Dilution:	10			Initial Weight/Volume:	266 mL
Analysis Date:	05/14/2014 1242			Final Weight/Volume:	5000 uL
Prep Date:	05/13/2014 0949			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	120		0.55	1.9
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,4-Dioxane-d8 (Sur)	65	D	70 - 130	

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-20D_050214

Lab Sample ID: 200-22183-7

Date Sampled: 05/02/2014 1052

Client Matrix: Water

Date Received: 05/03/2014 0950

522 MOD 1,4 Dioxane (GC/MS SIM)

Analysis Method:	522 MOD	Analysis Batch:	200-72050	Instrument ID:	CHZ.i
Prep Method:	3535A	Prep Batch:	200-72018	Lab File ID:	Z7522_013.D
Dilution:	1.0			Initial Weight/Volume:	269 mL
Analysis Date:	05/13/2014 1955			Final Weight/Volume:	5000 uL
Prep Date:	05/13/2014 0949			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	7.7		0.055	0.19

Surrogate	%Rec	Qualifier	Acceptance Limits
1,4-Dioxane-d8 (Sur)	92		70 - 130

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: MW-15S_050214

Lab Sample ID: 200-22183-8

Date Sampled: 05/02/2014 0803

Client Matrix: Water

Date Received: 05/03/2014 0950

522 MOD 1,4 Dioxane (GC/MS SIM)

Analysis Method:	522 MOD	Analysis Batch:	200-72050	Instrument ID:	CHZ.i
Prep Method:	3535A	Prep Batch:	200-72018	Lab File ID:	Z7522_014.D
Dilution:	1.0			Initial Weight/Volume:	255 mL
Analysis Date:	05/13/2014 2011			Final Weight/Volume:	5000 uL
Prep Date:	05/13/2014 0949			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	7.7		0.058	0.20

Surrogate	%Rec	Qualifier	Acceptance Limits
1,4-Dioxane-d8 (Surr)	95		70 - 130

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: MW-7S_050214

Lab Sample ID: 200-22183-9

Date Sampled: 05/02/2014 0858

Client Matrix: Water

Date Received: 05/03/2014 0950

522 MOD 1,4 Dioxane (GC/MS SIM)

Analysis Method:	522 MOD	Analysis Batch:	200-72100	Instrument ID:	CHZ.i
Prep Method:	3535A	Prep Batch:	200-72018	Lab File ID:	Z7545_004.D
Dilution:	2.5			Initial Weight/Volume:	263 uL
Analysis Date:	05/14/2014 1258			Final Weight/Volume:	5000 uL
Prep Date:	05/13/2014 0949			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	29		0.14	0.48

Surrogate	%Rec	Qualifier	Acceptance Limits
1,4-Dioxane-d8 (Sur)	82		70 - 130

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132Client Sample ID: **MW-5S_050214**

Lab Sample ID: 200-22183-10

Date Sampled: 05/02/2014 0953
Date Received: 05/03/2014 0950

Client Matrix: Water

522 MOD 1,4 Dioxane (GC/MS SIM)

Analysis Method:	522 MOD	Analysis Batch:	200-72137	Instrument ID:	CHZ.i
Prep Method:	3535A	Prep Batch:	200-72018	Lab File ID:	Z7556_011.D
Dilution:	33.33			Initial Weight/Volume:	269 mL
Analysis Date:	05/15/2014 1301			Final Weight/Volume:	5000 uL
Prep Date:	05/13/2014 0949			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	470		1.8	6.2
Surrogate	%Rec	Qualifier	Acceptance Limits	
1,4-Dioxane-d8 (Surr)	112		70 - 130	

Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1

Sdg Number: 200-22132

Client Sample ID: EB-6_050214

Lab Sample ID: 200-22183-11

Date Sampled: 05/02/2014 1120

Client Matrix: Water

Date Received: 05/03/2014 0950

522 MOD 1,4 Dioxane (GC/MS SIM)

Analysis Method:	522 MOD	Analysis Batch:	200-72050	Instrument ID:	CHZ.i
Prep Method:	3535A	Prep Batch:	200-72018	Lab File ID:	Z7522_019.D
Dilution:	1.0			Initial Weight/Volume:	265 mL
Analysis Date:	05/13/2014 2129			Final Weight/Volume:	5000 uL
Prep Date:	05/13/2014 0949			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
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1,4-Dioxane	0.84		0.056	0.19
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Surrogate	%Rec	Qualifier	Acceptance Limits
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1,4-Dioxane-d8 (Sur)	92		70 - 130
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Analytical Data

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132

Client Sample ID: FB-3_050214

Lab Sample ID: 200-22183-12

Date Sampled: 05/02/2014 1058

Client Matrix: Water

Date Received: 05/03/2014 0950

522 MOD 1,4 Dioxane (GC/MS SIM)

Analysis Method:	522 MOD	Analysis Batch:	200-72050	Instrument ID:	CHZ.i
Prep Method:	3535A	Prep Batch:	200-72018	Lab File ID:	Z7522_020.D
Dilution:	1.0			Initial Weight/Volume:	270 mL
Analysis Date:	05/13/2014 2144			Final Weight/Volume:	5000 uL
Prep Date:	05/13/2014 0949			Injection Volume:	2 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,4-Dioxane	0.74		0.055	0.19

Surrogate	%Rec	Qualifier	Acceptance Limits
1,4-Dioxane-d8 (Sur)	92		70 - 130

Quality Control Results

Client: Langan Engineering & Environmental Svcs

Job Number: 200-22132-1
Sdg Number: 200-22132**Surrogate Recovery Report****SOM01.2/VOA Tr Trace Water****Client Matrix: Water**

Lab Sample ID	Client Sample ID	VCL %Rec	CLA %Rec	DCE %Rec	BUT %Rec	CLF %Rec	DCA %Rec	BEN %Rec	DPA %Rec
200-22132-2	MW-18S_042914	103	101	79	88	94	100	101	84
200-22132-3	FB-1_042914	104	101	80	90	97	102	100	85
200-22132-4	EB-2_042914	105	103	80	91	97	102	101	85
200-22132-5	TRIP BLANK	107	105	82	95	100	106	103	87
200-22132-6	VHBLK01	111	104	78	104	98	103	104	87
200-22155-2	MW-19D_050114	108	106	82	100	100	110	102	88
200-22155-3	MW-16S_050114	105	105	80	98	98	110	102	88
200-22155-4	MW-17S_050114	95	98	77	89	94	98	98	82
200-22155-5	MW-17D_050114	99	103	81	96	98	107	100	87
200-22155-6	MW-21D_050114	100	105	81	96	97	109	101	86
200-22155-7	MW-21S_050114	100	105	82	99	100	108	101	89
200-22155-9	MW-20S_050114	96	103	100	98	97	108	99	87
200-22155-10	MW-11D_050114	102	106	87	101	101	110	101	87
200-22155-11	MW-5D_050114	101	102	83	99	98	108	99	85
200-22155-12	DUP_050114	102	102	84	94	98	107	99	84
200-22155-13	MW-15D_050114	107	108	105X	98	100	113	101	88
200-22155-14	FB-2_050114	104	108	82	97	99	107	100	86
200-22155-15	TRIP BLANK	105	110	81	98	100	111	103	89
200-22183-1	MW-12S_050114	104	105	200X	96	99	110	101	86
200-22183-1 DL	MW-12S_050114 DL	114D	122D	145X D	112D	110D	129D	105D	92D
200-22183-2	EB-4_050114	107	106	82	99	100	111	100	87
200-22183-3	MW-24S_050114	116	122	105X	111	110	134X	104	90
200-22183-3 DL	MW-24S_050114 DL	118D	123D	93D	115D	113D	135D X	102D	89D
200-22183-5 DL	MW-11S_050214 DL	117D	124D	117D X	114D	113D	131D X	108D	93D
200-22183-5	MW-11S_050214	116	124	229X	112	112	132X	104	89
200-22183-6 DL	MW-12D_050214 DL	121D	130D	95D	112D	115D	132X D	110D	95D
200-22183-6	MW-12D_050214	115	126	97	115	114	139X	105	90
200-22183-7 DL	MW-20D_050214 DL	117D	124D	95D	109D	109D	127D	106D	91D
200-22183-7	MW-20D_050214	113	118	121X	104	107	127	97	86

Surrogate	Acceptance Limits
VCL = Vinyl chloride-d3	65-131
CLA = Chloroethane-d5	71-131
DCE = 1,1-Dichloroethene-d2	55-104
BUT = 2-Butanone-d5	49-155
CLF = Chloroform-d	78-121
DCA = 1,2-Dichloroethane-d4	78-129
BEN = Benzene-d6	77-124
DPA = 1,2-Dichloropropane-d6	79-124